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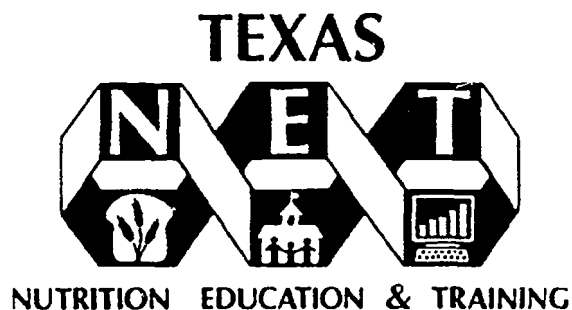
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ABSTRACT

The Nutrition Education and Training (NET) program is one of the Child Nutrition Programs (CNP) of the United States Department of Agriculture (USDA). The program was established in 1977 in an amendment to the Child Nutrition Act. This report focuses on evaluation and needs assessment of the Texas state program conducted during the fiscal year 1995, and offers recommendations for future program development. The publication is in four parts. Part 1 is an Executive Summary. Part 2, "Outreach of the NET Program," describes the nutrition education workshops developed by NET; the NET Lending Library; development and distribution of instructional materials on aspects of nutrition; presentations, exhibits, and publications; coordination with related publicly supported programs; and 12 recommendations. Part 3, "Report on the Project: An Assessment of Nutrition Education and Training Needs in Texas," discusses the background of the project including objectives, problem statement, and research methods; awarding of the project's contract; project accomplishments in 1993, 1994, and 1995; and four recommendations. Part 4, "General Evaluation of the NET Programs," covers program resources; program activities; meta-analysis of program outcomes, results, and discussions; and five recommendations. "Evaluation Instruments Used in NET Program Outreach" is included in the appendix. (ND)

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FINAL EVALUATION REPORT
OF
TEXAS NUTRITION EDUCATION AND TRAINING PROGRAM
FOR
FEDERAL FISCAL YEAR 1995



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I. EXECUTIVE SUMMARY

The Nutrition Education and Training (NET) program is one of the Child Nutrition Programs (CNP) of the United States Department of Agriculture (USDA). The program was established in 1977 in an amendment to the Child Nutrition Act (Public Law 95-166). States granted NET program funds are required to submit an annual performance report on the numbers of children, educators, food service personnel, Summer Food Service Program (SFSP) sponsors and parents receiving nutrition education and training by NET during the Federal Fiscal Year (FFY), and the number of schools and child care facilities of these target populations. In addition, the states are required to conduct formal evaluations and needs assessments of program activities and use the results as a basis for program improvement and planning. This report includes the evaluations and needs assessments conducted during FFY 1995.

Outreach of the NET Program

NET's outreach to its target populations is achieved through: (a) workshops developed by NET and delivered by contract trainers; (b) circulation of a NET library collection; (c) development and distribution of instructional and promotional materials on nutrition and food service management; (d) presentations, exhibits, and publications on nutrition education, food service management, and program evaluation; and (e) coordination with related publicly supported programs within the State.

Findings

Workshops

In 1995 NET delivered 251 workshops to 3,748 participants. The number of times each workshop was conducted varied from once to 62 times. The total number of participants in the individual workshops ranged from 7 to 1,029. Participation in NET workshops was about two and a quarter times the participation goal but the number of workshop participants decreased 8.5% from their number in 1994. NET met the participation goal set for school populations for the first time in the past ten years. In 1995 school populations (917) constituted 24.5% of the workshop participants compared to 14.9% in

1994. The majority of the participants (53.17%) worked in day care centers. The ratio of female to male participants was 10:1. Whites were the largest group participating in the workshops, comprising 38.4% followed closely by Hispanics (33.6%). African-Americans comprised 26.3%. NET workshops provided 16,396.5 hours of training to 1,264 educators, 1,864 food service personnel, 445 sponsors, and 90 parents, reaching about 1,624,065 children.

NET Lending Library

In 1995 the NET library circulated 6,396 items, a 10.6% increase over 1994. The library continued to circulate considerably more audiovisual than printed materials. The dominant theme of circulated items was food service management. The NET library served as a clearinghouse for in-service training courses to school food service personnel. The majority of the items were used in group education and training settings. The number of data base searches conducted by the library (133) decreased 10.7% over 1994, but the number of patrons (661) increased 21.7%. Library borrowers reached 33,767 children. They rated about half of the items they borrowed as *Excellent* in content, presentation, and usefulness and over one third of the items as *Good*. Library participation exceeded the goals set for 1995. However, library outreach to child care facilities was far less than its outreach to public school populations.

Development and Distribution of Instructional Material

Workshop development and revision accelerated in 1995. NET contract trainers developed four workshops and revised two more in the area of menu planning for schools and child care facilities. NET Project Coordinator collaborated with the Texas Affiliate of the American Heart Association to develop a workshop that consists of concepts and activities that were contained in the American Heart Association's *Health Star: Guidelines for Healthy School Meal Planning* and Southwest Region's *Project 2001: Nutrition for a New Century*.

Two videos and two brochures were developed by NET. One of the video's (*Feeding Children Well*) incorporated current nutrition research, USDA's Food Guide Pyramid and accepted principals of early childhood development. The other video (*Hey What's Cookin'?*) emphasizes successful marketing strategies used by 6 Texas ISD food service directors to market USDA food programs to high school students.

One of the brochures was developed to explain the importance of calcium and list its sources and the other was developed to promote healthy snack choices.

To provide materials to the large Hispanic population in Texas the training materials developed for the *Off to a Good Start for Day Homes* workshop and the *Feeding Children Well* video were translated into Spanish.

The total number of materials distributed was 52,782, reaching about three fold their number in 1994. The increase was in almost all types of distributed materials.

Presentations, Exhibits, and Publications

Twelve conference presentations were delivered on the NET program, nutrition, and NET program evaluation, 5 of which were given at national conferences. Audiences were approximately 80 educators, 250 parents, 375 food service personnel, and 400 university professors and program evaluators.

The contract trainers delivered 6 presentations compared to 35 in 1994. The total number of participants was 147, a sharp decrease from 1,205 participants in 1994. About 13,239 were reached by the participants compared to 76,242 children in 1994. NET staff and contract trainers delivered 22 classroom presentations to 1,101 children.

A total of 7 exhibits were held in 1995, the same as 1994. Exhibit themes were the NET program and library and Project 2001/Health Star Curriculum.

Six publications were issued on NET, 3 were on evaluation, 2 were on the NET Library and 1 on NET workshops.

Coordination With Related Publicly Supported Programs

NET collaborated efforts with the Southwest Region Food and Nutrition Service, the Louisiana, Oklahoma and Texas (LOT) coalition; the Texas Affiliation of the American Heart Association (AHA); Texas School Food Service Association (TSFSA); Texas Education Agency (TEA); Texas Department of Agriculture (TDA); the University Of Texas at Austin and Southwest Texas State University; Prairie View A&M University; Texas Head Start Centers; Texas Parent Teacher Associations (PTA's); and Austin Independent School District (AISD). NET also participated actively in the Texas Interagency Council on Nutrition (ICON) and the State Agency Libraries of Texas (SALT).

Recommendations

- Statewide scheduling of NET workshops considerably increased the number of workshops delivered during 1995 while the number of workshop participants decreased. To encourage prospective targets to register in NET workshops, NET needs to simplify and automate the procedures of workshop registration. Automated phone registration may replace the current on-line registration. NET should seek the cooperation of a Texas university or a community colleges in using its automated system of registration.
- Research indicates that single workshops could result in a change in knowledge, but changes in attitudes and practices are achieved by more extensive instructions. In 1995 NET developed several workshops on Menu Planning. It is recommended that NET arrange these workshops in two series, one for school food service personnel and the other for pre-school food service. The series should include workshops that provide information basic to menu planning such as kitchen math and creditable foods. These series of workshops would allow for organizing the content in a spiral curriculum that is organized to reinforce main concepts and meet the needs of participants at different levels of competence.
- Most of the workshops offered in 1995 targeted food service personnel. In addition, changes in NET policies required day home sponsors to attend NET workshops in lieu of their providers which further decreased the number of educators participating in NET workshops. It is recommended that NET boosts educators' participation by coordinating teacher training with TEA and the Education Service Centers.
- Since the NET Library circulation to day care centers and family day homes improved considerably in 1995, it is recommended that current promotional efforts directed to these facilities continue. NET could also develop movable exhibits and short presentations on samples of suitable materials to be presented in these facilities.
- Since children's story time efforts are hindered due to difficulties in arranging for children's transportation from child care facilities to the NET library NET may consider conducting storytime in day care centers and public libraries to promote the expanding collection of children's books and audiovisual materials in the library.
- NET needs to maintain mailed and published information about the library collection as an important source of library outreach. Distributing library catalogs,

bibliographies, and updates to schools and child care facilities and publishing articles and announcements in magazines and newsletters was an effective means of library outreach in the past and should continue and expand.

- Since few parents were reached through NET's direct interventions in FFY 1995 and in previous years, it is recommended that NET develop and deliver presentations and handouts for parents. NET should continue efforts to reach parents in PTA meetings and through their children in schools and child care facilities.
- Since NET participates in promotional campaigns such as Texas School Breakfast Week and Texas School Lunch Week, the NET library could prepare packages of audiovisual and print materials to support these campaigns as they are held, and provide information to groups and individuals that are interested in learning more about the subjects of the campaigns.
- Due to considerable decline in the number of presentations and participants in this intervention it is recommended that NET review its efforts in this direction. NET's past efforts in developing standard presentations with specific objectives and targets in mind and coordinating these presentations with training provided by other entities such as Head Start, SFSP Sponsors, Early Childhood Intervention and Education Service Centers boosted the number of presentations and participants in the past.
- To reach the few SFSP sponsors in Texas, NET may develop an individualized instruction unit on NET and on basic nutrition concepts that are beneficial to this target population. Simple evaluation instruments should be included in the unit to ensure sponsors' mastery of the unit's content. NET may coordinate the distribution of the unit with the annual training TDHS provides for the sponsors, and augment the unit with exhibits and brochures.
- NET should continue its enhanced efforts in publications to inform the public of NET program services and share experiences and ideas on nutrition education and evaluation with professionals. Regular announcements on NET activities and services may be shared with newsletters aimed at NET target populations.
- NET's diligent coordination with related publicly-supported programs resulted in measurable increases in participation and in contributions state and nationwide. This coordination should continue and should be extended to commodity and food distribution programs, and to related non-profit community organizations.

Report on the Project: An Assessment of Nutrition Education and Training Needs in Texas

In 1992 NET developed a Request for Proposal (RFP) to conduct a three-year comprehensive needs assessment statewide, and is currently directing the project. During the first year, the Delphi technique was used to develop criteria for nutrition education and training in Texas with respect to children, parents, educators, food service personnel, and administrators. The criteria were then used to develop instruments and procedures to collect data on the nutrition knowledge, attitudes, and practices of the school populations and to analyze these data with respect to family income, ethnicity, age, sex, and scholastic achievement.

In 1994 data were collected on the nutrition and nutrition education knowledge, attitudes and practices of the target populations. Measurements of children's health and physical fitness were taken on school sites. School food service and children plate waste were also observed on site. Needs were identified by comparing the actual state of nutrition education and training with the developed criteria. The results of the study were analyzed with respect to children's family income, ethnicity, age, sex, and scholastic achievement. Recommendations were developed based on the results. Two final yearly reports on the needs assessment were written in 1993 and 1994.

In 1995 the nutrition and nutrition education and training needs of preschool populations were assessed. Instruments to assess knowledge, attitudes and practices were developed based on the goals and goal indicators that were developed in year 1 of the project. Procedures for measuring children's physical fitness and health, assessing their plate waste, and observing food service practices were developed. A sample of family day homes and day care centers was drawn from the eleven regions under the jurisdiction of TDHS.

Results indicated that younger children and parents did not achieve the 70% nutrition knowledge level. Nutrition attitudes were positive. Food choices based on the Dietary Guidelines for Americans (DGA's) were below the 70% level for children, parents and educators. Observed food intake of children revealed a refusal rate of more than 10% of many CACFP food components.

Although planned menus were adequate for children's nutritional needs the menus implemented were not in compliance with the CACFP guidelines.

Refrigerator and freezer temperatures were not in compliance in some facilities. Food service cleanliness of work areas was not maintained. Routine handwashing by child care staff and children was not enforced. No food component qualified 100% of the time for breakfast and lunch menus due to insufficient serving size.

Day care center directors, food service personnel and teachers as well as family day home sponsors and providers identified nutrition education topics of interest and preferred methods of receiving information on these topics.

Recommendations

- NET incorporated some of the results of the project in its current plans and activities and it is recommended that NET continues to do so in the future. It is also recommended that NET coordinate efforts with other agencies interested in food and nutrition and nutrition education and training based on the results of the needs assessment.
- NET disseminated the results of the first stage of the needs assessment to ICON members and to other state and community agencies and groups in Texas that are interested in food and nutrition and nutrition education and training and it is recommended that NET continues to do so with respect of the second stage of the project.
- Texas NET shared the yearly accomplishments of the project and experiences gained with the rest of the states to avoid possible duplication of efforts and enhance efforts toward better methodologies and outcomes, and should continue to do so with respect of the second stage of the project.
- NET should review the results of the comprehensive needs assessment when developing future evaluation and needs assessment plans to answer questions that may have been raised or left unanswered by the comprehensive needs assessment.

General Evaluation of the NET Program

The purpose of this study was to assess overall program performance in FFY 1995. The results of the evaluations conducted during the year were combined to produce an index of program effectiveness.

Findings

The NET program budget remained almost the same as 1994 in spite of the increase in the number of children in Texas, and expansion in NET program activities. NET invested \$ 165,000.00 out of the 1994 budget in research.

A contract was renewed with the Texas School for the Deaf to package and mail distributed instructional/promotional materials and workshop curricula. NET awarded 24 contracts to trainers to deliver workshops and participate in workshop development and material evaluation. One contract was awarded to an independent contractor, to translate instructional materials into Spanish. The contract with Texas Tech University (TTU) to conduct a needs assessment was renewed for a third year. Two contracts were awarded to Spanish speaking trainers to implement the Padres Hispanos En Accion Project. Monies for the two contracts come from USDA Food and Consumer Services.

The vote-counting method of meta-analysis was applied to integrate results of the evaluation of program activities in 1995. Results of the analysis revealed an overall positive impact of the NET program in Texas. Twelve evaluations were positive, and three outcomes were negative. The negative results were due to possible lack of coordinating teacher training and need to improve workshop registration policy. Two of the outcomes were neither better nor worse than last year.

Recommendations

- Few NET activities are directed toward promoting use of the cafeteria as a learning laboratory. NET may develop presentations and materials for use in the cafeterias and for reinforcing, in the classroom, knowledge and attitudes gained from these activities.
- NET should continue the function of a clearinghouse and a consultant to organizations, facilities, groups, and individuals on nutrition education and training in general, and on best practices in the field.
- NET may recruit the contract trainers in consulting workshop participants as they apply the knowledge and skills gained from the workshops in their work environments. Similar services could also be provided to schools, child care centers, day homes, and parents in general. The trainers could provide menu analysis and dietetic consultations to soup kitchens, half-way homes, and to other organizations serving at-risk groups such as the indigent and the homeless.

- Since NET is expanding its interventions and strategies, there is an emerging need for measuring the relative cost-effectiveness of various interventions and alternative strategies. Emphasis should be placed on more successful and cost-effective interventions and strategies.
- There is a need to direct more efforts toward measuring the quality of NET's services and follow-up with necessary improvements.

II. OUTREACH OF THE NET PROGRAM

Introduction

Background

NET is one of the USDA child nutrition programs. The program was established in 1977 in an amendment to the Child Nutrition Act (public law 95-166). The USDA administers the program through grants to state agencies. The NET program supports the other USDA child nutrition programs; namely, the NSLP, the SBP, the Special Milk Program (SMP), the Child and Adult Care Food Program (CACFP), and the SFSP. With the exception of the NSLP and SBP for public schools in Texas, the rest of these programs, including NET, are under the jurisdiction of TDHS. They are administered by the Special Nutrition Programs (SNP) section of the Client Self-Support Services division.

States granted NET program funds are required to submit an annual report--the FNS 42--reporting the number of educators, food service personnel, SFSP sponsors, and parents receiving nutrition education and training during the fiscal year, and the number of schools and child care facilities of these target populations. Effective FFY 1993 the report has to include data on the contracts and grants awarded by a State program. The report must be completed within 90 days after the close of the FFY in order for the state to receive the program grant for the succeeding year. In addition, states are required to conduct formal evaluations and needs assessments of program activities and use them as a basis for program improvement and development. This report includes the evaluations and needs assessments of program activities implemented during FFY 1995.

Goal of the NET Program

The goal of the NET program is to promote optimal health and well-being of the nation's children through improved nutrition. To achieve its goal, the NET program provides nutrition education and instructional resources for children and for key individuals in the learning environments of children. Parents or guardians, caregivers and teachers, as well as food service personnel who prepare meals for the children, are considered individuals who affect the nutritional status of Texas children and contribute to children's nutrition knowledge, attitudes, and behaviors.

Four goal areas were identified in NET's State Plan Update For 1995. They are:

1. Assure that children have opportunities to learn about and to practice good eating habits in schools and child care facilities participating in USDA's child nutrition programs. This goal area is achieved by providing education and instructional materials for children, teachers, and food service personnel.
2. Facilitate integration of effective nutrition learning activities--including use of the cafeteria as a learning laboratory--into instruction at all grade levels from preschool through high school. This goal area is achieved by providing information and instruction to help teachers improve their child nutrition related knowledge, attitudes, and behaviors.
3. Assure that nutritious, appealing, and safe meals and snacks are served in schools and child care facilities. This goal area is achieved by providing information and training to help food service personnel improve their child nutrition related knowledge, attitudes, and behaviors.
4. Provide support for nutrition education and food service management practices in schools and child care facilities participating in the reimbursement programs. This goal area is achieved by developing educational materials, keeping the lending library collection current, acquiring and distributing materials, and coordinating services with other public-sector agencies interested in promoting children's health and well-being through improved nutritional status.

In order to assure that the Texas NET program reaches as much of the target population as possible, annual participation goals are set for each of the program's major activities and for each of its target populations. Goals are based on current priorities, current staffing, and prior participation figures. Actual participation is monitored and compared

against the goals for the year. Information about goal attainment then is used to establish objectives and make plans for the following year.

Goals for NET's Outreach

Data about staffing levels and participation in FFY 1985 were used as a baseline in setting goals for 1995. Using 1985 as the baseline is appropriate because all of the designated NET staff positions were filled during that year and evaluation studies demonstrated that the program was both challenging and successful.

During 1985 there were approximately 6 full-time equivalent NET staff positions that supported NET workshops and 2.5 positions that supported the NET lending library. The staff-to-participant ratios were 1:400 for NET workshops and 1:1500 for the NET lending library.

FFY 1995 witnessed a relative stability in program staffing. The staff consisted of a Program Coordinator, a Program Evaluator, a Workshop Coordinator, a Project Coordinator, a Librarian, an Information Specialist, a Workshop Assistant, a Library Assistant, and a Secretary. In addition to the NET staff, NET contracted with 24 trainers to deliver NET workshops throughout Texas and to evaluate instructional materials. Following is an estimate of NET's workshop and library full-time equivalent positions in 1995.

Table 1**Estimate of Workshop and Library Full-Time Equivalent Positions in 1995**

Intervention	Position	Full-Time Equivalent
Workshops	Workshop Coordinator	1.00
	Contract Trainers	2.16
	Workshop Assistant	<u>1.00</u>
	Total	4.16
Library	Project Coordinator	0.50
	Librarian	1.00
	Material Evaluator (Contract Trainers)	0.15
	Library Assistant	<u>0.75</u>
	Total	2.40

*Note: Estimate is based on amount of money used for trainers' contracts divided by the annual salary of comparable TDHS trainers. Only about 85% of the contract trainers' time was devoted to workshops.

Thus, there were approximately 4.16 full-time equivalent staff positions in support of the workshops and 2.40 staff positions in support of the library. By substituting these figures in the staff-to-participant ratio, overall goals were set for FFY 1995 at 1,664 individuals participating in NET workshops and 3,600 individuals for the library.

Information about program priorities was used in adjusting the goals for different target groups. The 1990-1991 State Plan indicated that approximately 40% of NET's efforts would be directed at public school populations and 60% at other target populations. A 1994 amendment of this State Plan did not change NET priorities. Accordingly, the goal for workshop participants was set at 666 for public school populations and 998 for other populations. The goal for library circulation was set at 1,440 individuals for public school populations and 2,160 individuals for other populations.

NET's Outreach Interventions

NET's outreach to its target populations is achieved through multiple interventions which include:

- Workshops developed by NET staff/contract trainers and delivered by contract trainers
- Circulation of the NET library collection
- Development and distribution of instructional materials on nutrition education and food service management
- Presentations, exhibits, and publications on nutrition education, food service management, and NET program evaluation
- Coordination with related publicly supported nutrition programs in the State

Following are NET's efforts to reach Texas children through each intervention and the outcomes of these efforts.

Workshops

Introduction

Conducting nutrition education workshops to prevent disease and enhance the well-being of the State's children is a major activity of the NET program. The NET program provides information and resources to instruct educators, food service personnel, parents and sponsors of SFSP and day home providers. NET's information and resources are mainly on the fundamentals of nutrition and how to convey this information to motivate children to make healthy food choices. The expected outcomes are improved nutritional status for children and reduced food waste in schools and child care facilities.

NET has developed a total of 25 workshops since 1985, and continued to offer all NET workshops until 1993. In 1993 NET decided to offer a limited number of workshops to increase participation in individual workshops and enhance workshop efficiency. The

workshops offered were to be selected on the bases of their popularity in previous years and relevance to the largest number of NET target populations. Consequently, 9 workshops were offered in addition to a *Train the Trainer* workshop for NET contract trainers. Workshop topics included nutrition education, food service management, menu planning, and sanitation. Contract trainers conduct the workshops throughout Texas and provide free materials to eligible participants. Participants receive certificates verifying hours of attendance.

In 1986 interagency agreements and curriculum modifications were negotiated to obtain the approval of TEA for two NET workshops to be made available to public school teachers for advanced academic training (AAT). Two additional workshops were approved by TEA for AAT credit in 1988. In 1992 further negotiations with TEA resulted in a general agreement that all NET six-hour workshops are automatically approved for AAT credit. These agreements are positive steps toward increasing workshop participation.

Method of Evaluating the Workshops

Continuous evaluation of NET workshops resulted in revisions and improvements of the content of these workshops, as well as in the methods and materials used in their delivery. The performance of workshop participants is evaluated using knowledge tests and attitude scales. In some instances, the behavior of the participants is evaluated as well. For example, in 1988 the menus planned by food service personnel were evaluated before and after their participation in the *Menu Planning and Kitchen Economy* workshop to find out if their compliance with the CACFP regulations increased as a result of their participation.

Data on the effectiveness of a workshop as a whole are collected from the workshop participants using a standard workshop evaluation form. In addition, the performance of the contract trainers is observed and evaluated periodically by NET staff using a workshop instructor evaluation form. The same form is used as a self-evaluation tool by the trainers to guide the process of workshop development and delivery. Copies of the workshop evaluation form and the instructor evaluation form are included in the Appendix of this report.

Data on the number of workshop participants and their functions, work facilities, ethnic backgrounds, and the number of children they reach, are collected on each workshop for administrative purposes and to evaluate workshop participation. A registration form is used to collect these data. A copy of the registration form is included in the Appendix.

Workshop Participation

Workshops Conducted

A total of 251 workshops were conducted in FFY 1995, compared to 192 workshops in FFY 1994 and 193 workshops in 1993. Thus, the number of workshops conducted in 1995 increased 30.7 % over the past two years. This increase may be due to the statewide registration for the workshops. Table 2 contains the titles and durations of workshops conducted during FFY 1995, as well as the number and percent of workshop participants.

Table 2

Number and Percent of Participants in NET Workshops Conducted in 1995

Workshop	Workshop Duration in Hours	Number of Times Conducted	Number of Participants	Percent of Participants
Menu Planning - Part 1	4.0	62	1,029	27.5
Guidelines for Selecting Creditable Foods and Beverages	5.0	47	702	18.7
Planning Nutritious Snacks	4.0	53	644	17.2
Project 2001/Health Star	2.5	31	372	9.9
Sanitation and Health	5.0	20	341	9.1
Nutrition and the Preschool Child	6.0	13	297	7.9
Off to a Good Start	6.0	19	285	7.6
Puppets in Nutrition Education	4.0	5	71	1.9
Kitchen Math	6.0	1	7	.2
TOTAL	42.5	251	3,748	100.0

Table 2 shows that the duration of the workshops ranged from 2.5 to 6 hours. The 2.5 hours workshop titled *Project 2001/Health Star* was a 2 hour presentation titled *Project 2001/Nutrition for a New Century*. This presentation was developed into a workshop to incorporate additional concepts and hands on activities developed by the Texas affiliate of the AHA. The number of times each workshop was conducted varied from once to 62 times. The workshop conducted the most was *Menu Planning - Part 1*, followed by *Planning Nutritious Snacks* and *Guidelines for Selecting Creditable Foods and Beverages*. These workshops were revised and scheduled statewide during 1995. These three workshops were designed to provide educators, food service personnel, parents and day home sponsors of preschool children with nutrition information and guidelines on USDA meal patterns.

Three other workshops followed the workshops mentioned above in the number of times conducted. These include *Project 2001/Health Star*-- Conducted 31 times, *Sanitation and Health*--conducted 20 times, and *Off to a Good Start*--conducted 19 times. Unlike the other four workshops, *Project 2001/Health Star* and *Sanitation and Health* target school populations. The goal of *Project 2001/Health Star* is to assist schools in their efforts to comply with the USDA dietary guidelines. The *Sanitation and Health* workshop is one of NET's first and most popular workshops. It was developed to provide food service personnel with guidelines to ensure that safe food is prepared and served.

Participation in each of the six workshops was somewhat proportional to the number of times conducted. The average participation in each workshop ranged from 12 to 17, with the highest average participation in *Sanitation and Health* and the lowest average participation in *Planning Nutritious Snacks* and *Project 2001/Health Star*. Participation in the other three workshops that were conducted once varied considerably from 7 to 23.

A *Train the Trainer* workshop was delivered once during FFY 1995 to enhance knowledge and skills of NET contract trainers. The workshop lasted for 2 half-days and 1 whole day.

Workshop Participants

As mentioned above, the number of workshops conducted in 1995 increased 30.7 % over their number in 1994. In 1995 the number of workshop participants however was 8.5% less than their number in 1994, indicating a decrease in the number of participants in individual workshops.

It was stated previously that the workshop participation goal for 1995 was set at 1,664. Actual participation in NET workshops (3,748 participants) was about two and a quarter

times the participation goal. But, since the number of participants attending NET workshops decreased in 1995 compared to 1994, without similar decreases in budget or staffing, NET needs to consider possible improvements in the workshops and/or workshop scheduling and promotional procedures.

Participants' Sex and Ethnicity

To ensure equitable distribution of NET services to some extent, workshop participants are asked to indicate their sex and ethnicity in addition to their function and facility. Considering the fact that the majority of food service personal and educators are females, it is not surprising that 335 of the participants were males and 3,408 were females, a ratio of 1:10. Figure 1 illustrates the number of participants from each of the ethnic groups.

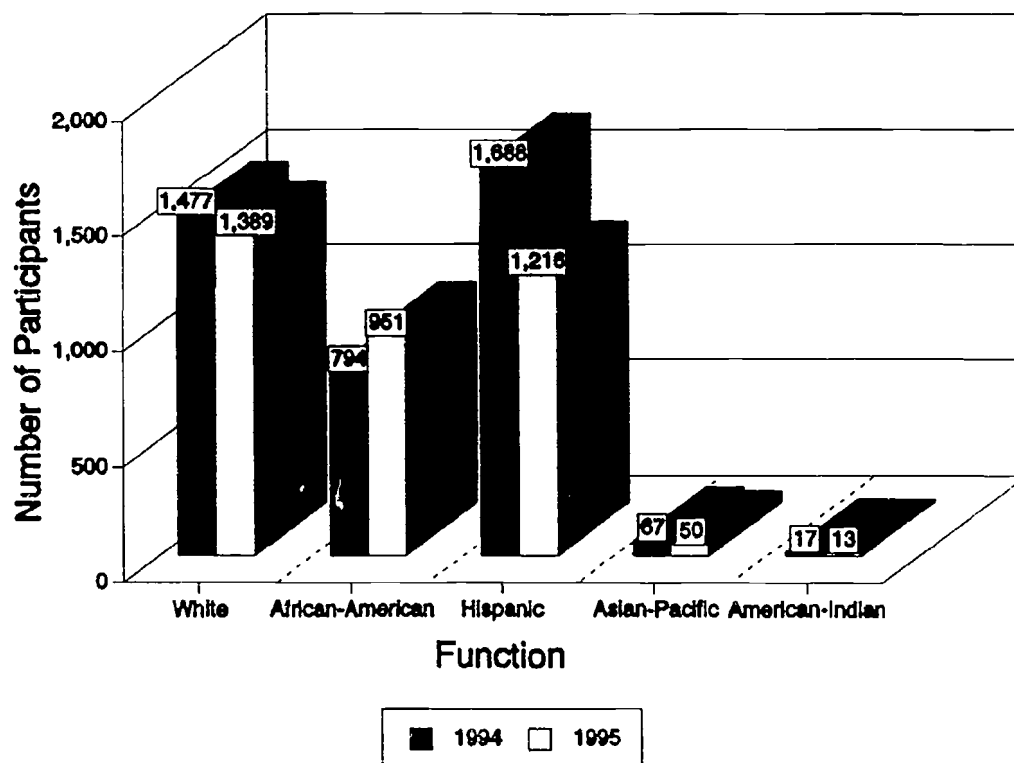


Figure 1. Workshop Participants' Ethnicity

Figure 1 shows that while Hispanics were the largest group participating in NET workshops in 1994, comprising 41.7% Whites were the majority in 1995, comprising 38.4%. Hispanics were 33.6% of the participants and African Americans were 26.3%. Both Hispanics and African-Americans participated in numbers greater than their actual representation in the population. In Texas, Hispanics comprise about one quarter of the population and African Americans comprise approximately 12 percent. In 1995 Hispanics and African-Americans still participated in numbers greater than their actual representation in the population. Other factors considered however, such as poverty level and eligibility for participation in the CNP, justify this level of participation by these two groups.

Participants' Facilities

As mentioned above, NET's goal was to direct 40% of its efforts to public school populations and 60% to other targeted populations. To assess the achievement of this goal, the work facilities and the functions of workshop participants were studied. Figure 2 represents the different facilities of workshop participants in 1993, 1994, and 1995.

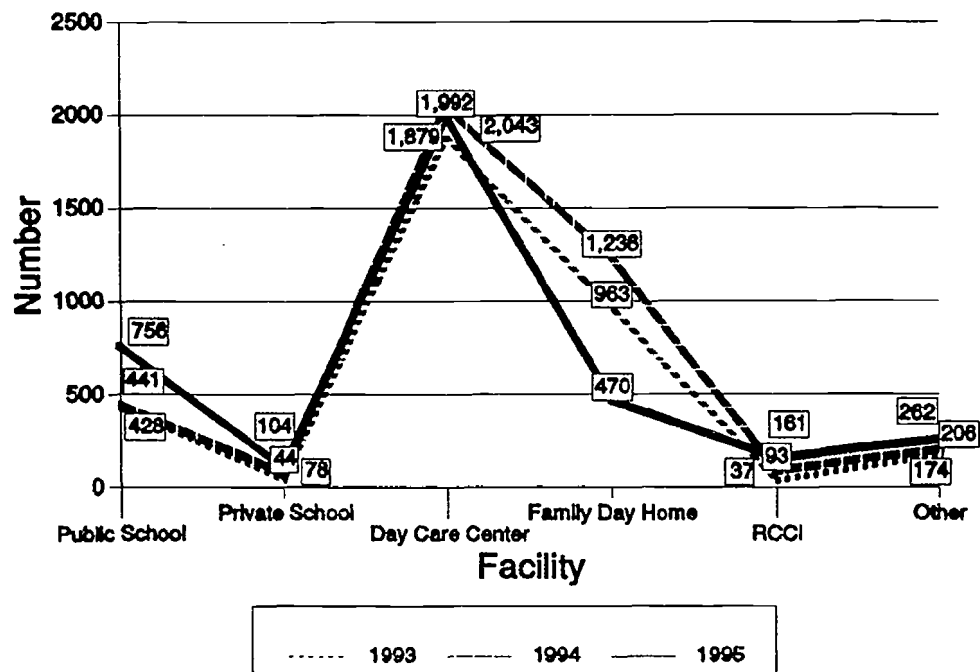


Figure 2. Facilities of Workshop Participants in the Past Three Years

Figure 2 indicates that a general participation trend prevailed in the past two years, and started to shift in 1995. Participants from day care centers and registered family homes were reached more than participants from public or private schools. This trend is a continuation of a trend that started in previous years and prompted a regulation in 1989 as to the proportion of participants from school population and from other population (40:60). In 1995, the increase in the number of participants who worked in public schools was greater than the increase in participants from day care centers or family day homes. This shift in trend was in the desired direction.

Shortage in teacher training funds for travel and substitute teaching may have discouraged public school teachers from participating in NET workshops in the past two years. Participation of food service personnel in *Project 2001/Health Star* and the *Sanitation and Health* workshop in 1995 (19% of total workshop participation) somewhat offset the decrease in teacher participation. The *Sanitation and Health* workshop drew 22.2% of the participants in 1993 and 23.0% in 1994, yet it still lagged behind the puppetry

workshop scheduled statewide in 1993 and *Guidelines for Selecting Creditable Foods and Beverages and Nutrition and the Preschool Child* scheduled statewide in 1994. These three workshops are geared toward preschool populations. In 1995, all workshops were scheduled statewide but most of the workshops offered targeted pre-school populations. Participants from day care centers constituted the majority of the workshop participants.

There were 917 participants from public schools in 1995, compared to an anticipated goal of 666 participants. Thus, NET met the anticipated goal. NET's efforts toward attracting public school populations should continue by offering workshops that target these populations and scheduling these workshops statewide. NET may also consider enhancing coordination efforts with the education service centers, and coordinating teacher training with similar training provided by TEA.

Participants' Functions

Figure 3 shows the different functions the participants performed in their work facilities in the past three years.

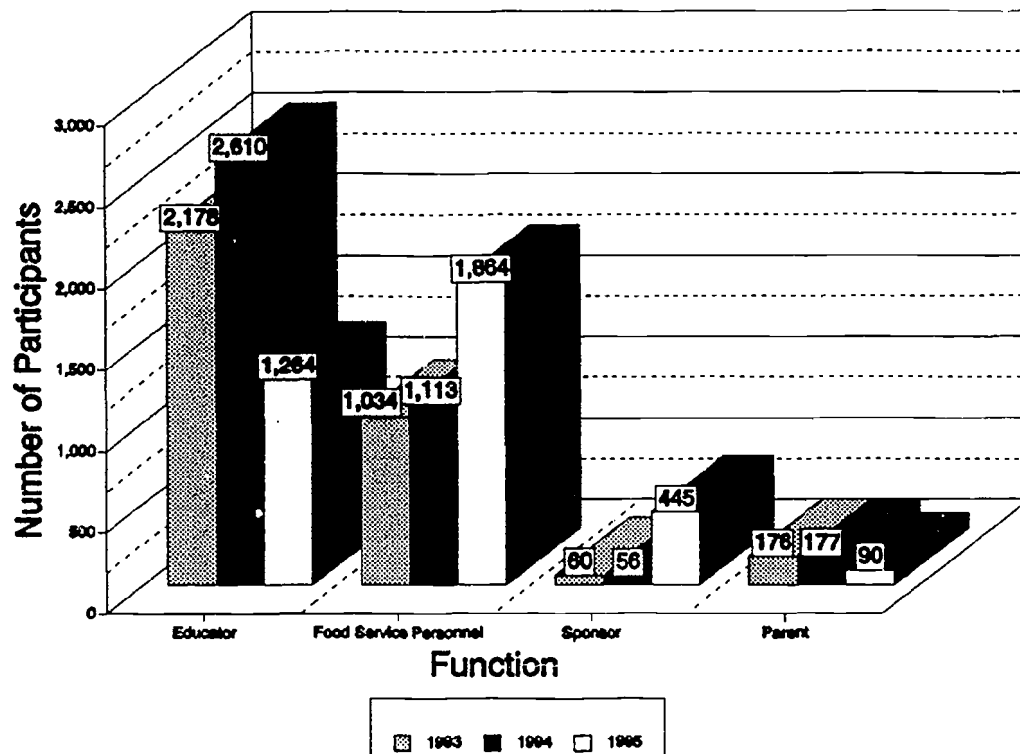


Figure 3. Function of Workshop Participants in the Past Three Years

Data in Figure 3 reflects shifts in the numbers of participants performing different functions in 1995. The number of educators decreased by half from their number in 1994, while the number of food service personnel increased 67.5%. In 1993 and 1994 the number of educators rose 24.0% and 48.6% respectively, yet the number of food service personnel dropped 38.1% and 33.4%. Most of the 1993 and 1994 participating educators worked in child care facilities. This shift in the function of participants from one year to another coincides with the type of workshop scheduled statewide in a particular year. When the puppetry workshop was scheduled statewide in 1993, there was an increase in child care educators. In 1994, *Guidelines for Selecting Creditable Foods and Beverages* and *Nutrition and the Preschool Child* boosted the numbers of child care educators. In 1995 most of the workshops scheduled statewide targeted food service personnel. In addition, changes in NET and in the CACFP policies required sponsors of day homes to attend NET workshops instead of their day home providers, which resulted in a decrease in the number of educators and increase in the number of sponsors.

Starting in 1993, NET is required to report the number of SFSP sponsors receiving instruction. Revision in the workshop registration form included an item asking the participants whether or not they were SFSP sponsors. Five hundred forty seven participants (14.6%) answered in the affirmative. The actual number of SFSP sponsoring organizations in 1995 was 288 serving food in 1,798 sites. More than one individual participated from each organization.

Hours of Training

Figure 4 illustrates the number of hours of training delivered to educators and food service personnel in schools and child care facilities in 1995.

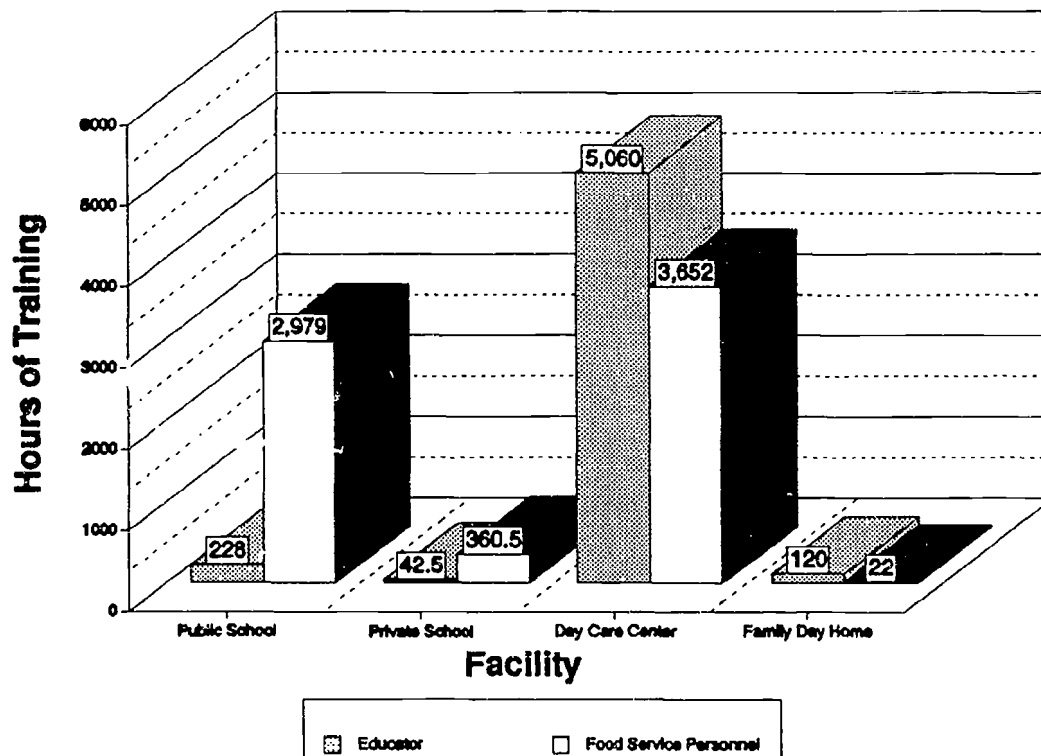


Figure 4. Training Hours Delivered to Educators and Food Service Personnel in 1995

Figure 4 shows a difference in the number of training hours delivered to educators and to food service personnel in schools and child care facilities. Food service personnel in public and private schools received more training hours than educators in these schools. The number of training hours delivered to child care educators, on the other hand, was more than 22 times the hours delivered to public school educators, more than one and half times (1.7 times) the training hours delivered to school food service personnel and 1.4 times the training hours delivered to food service personnel in child care facilities.

Two reasons may have caused the increase in school food service training relative to school educators. The American School Food Service Association (ASFSA), TSFSA, and TEA encourage continued education and certification of food service personnel. NET actively coordinates efforts with these organizations and participates in their meetings and conferences. Thus, NET reached school food service personnel directly and indirectly. NET needs to direct similar efforts to reach school teachers.

The total hours of training delivered in 1995 (16,396.5) was 16.2% less than that of 1994 (19,575.5). This decrease reflects the overall decrease in the number of workshop participants.

Participation in Food Programs

The NET program was designated to support the other USDA child nutrition programs. Information on the food programs implemented in the facilities of workshop participants is a measure of NET's effect on these programs. Table 3 lists the number and percent of workshop participants who indicated their facilities' participation in the different food programs.

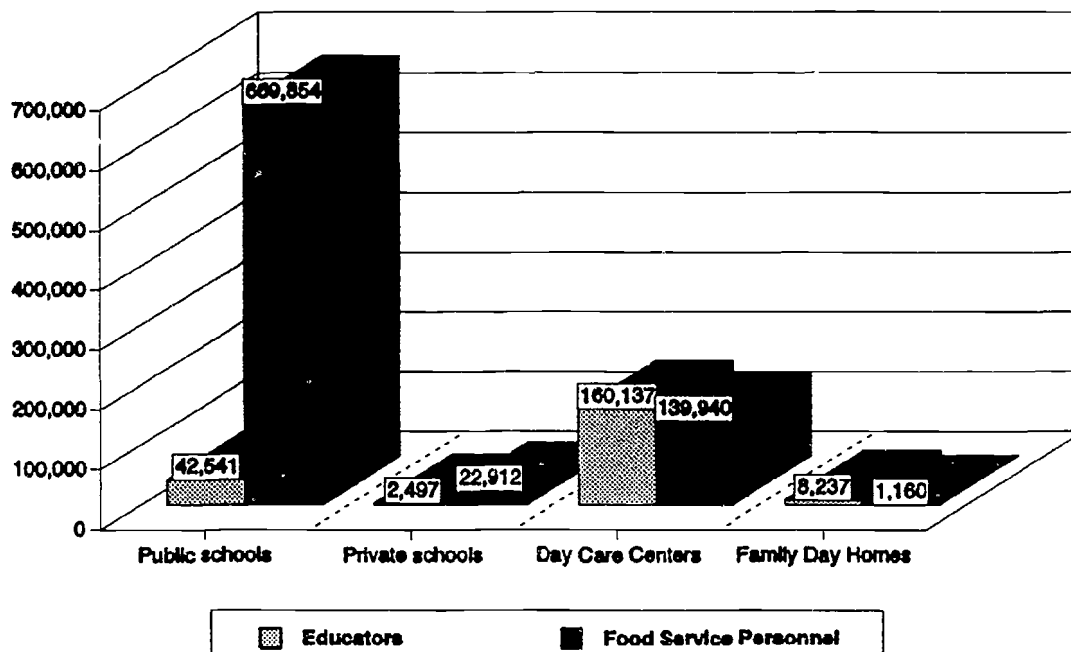
Table 3**Workshop Participants' Food Programs**

Food Program	Number of Participants	Percent of Participants
CACFP	2,159	62.3
NSLP/SBP	617	17.8
More than 2 food programs	243	7.0
NSLP	230	6.6
SFSP	26	0.8
SBP	15	0.4
SMP	6	0.2
None	170	4.9
TOTAL	3,466	100.0

It is apparent from Table 3 that the facilities of the majority of workshop participants (62.3%) participated in the CACFP. This is because the majority of workshop participants worked in child care facilities. Only 4.9% of the workshop participants indicated that their facilities did not participate in any food program.

Children Reached Through Workshop Participants

Figure 5 shows the number of children reached through educators and food service personnel in 1995.



*The same children may be reached by more than one participant.

Figure 5. Number of Children Reached by Educators and Food Service Personnel

Figure 5 shows that the number of children reached by school food service personnel exceeded the number of children reached by school educators due to the difference in the number of children reached by individual participants in these two groups. More school food service personnel participated in NET workshops as well. On the other hand, the number of children reached by educators in child care facilities was more than the number of children reached by food service personnel, as more educators than food service personnel from these facilities participated in NET workshops. Thus, it seems reasonable to assume that workshops are a viable means of reaching children indirectly, and that increasing workshop participation has a direct effect on the number of children reached.

Net Lending Library

Introduction

The NET lending library is one of the key elements in the Texas State Plan for promoting children's health and well-being through improved nutrition. The library collection includes over 4,400 printed and audiovisual materials on nutrition, nutrition education, and food service management. In the past three years materials in Spanish and children books were boosted in the collection. Children materials in the library collection include 502 different titles, 135 (26.4%) of which were purchased during the past year. The library acquired 64 Spanish titles in the past three years. The Spanish collection doubled in the past year. The collection was weeded and new items were added. The new items were evaluated by registered dietitians to make sure that the collection remains a source of up-to-date, well presented, and useful information. Circulation of this collection provides children, parents, educators, food service personnel, and others who are interested in child nutrition and nutrition in general with ready access to materials to teach nutrition and to plan and prepare nutritious meals.

In addition, use of the lending library by other state agencies and public programs has at least two added advantages: (1) it increases the NET program's outreach, and (2) it reduces the probability of duplicate development or acquisition of materials on nutrition education. Thus, improved coordination of the NET library services assures more efficient use of federal and state resources allocated to support child nutrition and health.

Circulation of the NET library collection is managed by a full-time NET program librarian and a librarian assistant. Requests to borrow items from the collection are made by mailing an order form, by calling, or by using an 800 telephone number dedicated to the NET program. Materials are delivered and returned by post or parcel service for borrowers who are located outside Austin, while those who are located in Austin have the option to check out and return materials in person. Borrowers are strongly urged to insure items at full value when returning them to the library so that the risk of loss in transit is minimized. However, other than the cost of return postage and insurance, use of the lending library is free of charge.

Since March 1993 the NET library moved to a more spacious location that accommodates the expanded library collection and allows for improved facilities. Library facilities include a room equipped for video, slide or filmstrip preview, two reading tables to review print materials, and a special corner for children. The children's corner contains materials suited for children such as puppets, games, models, and books.

Method of Evaluating the Lending Library Participation

Data on library performance and circulation are accumulated using a library feedback form. The form consists of items that are intended to collect information on the borrower's function and work facility, how the item was used, and the borrower's evaluation of the item. The form is revised periodically to improve the accuracy of collected data. A copy of the form is included in the Appendix of this report.

The library feedback form is provided to borrowers with each circulated item. Borrowers are urged to fill out the form and return it with the borrowed item. Since the library feedback form is filled out and submitted after using the items, only about 40.8% of the borrowers returned the form with the borrowed items in the past year. In 1991 a follow-up procedure was developed to remind the library borrowers to return the feedback form to collect more accurate data on material circulation.

Due to the nature of library services, and the way borrowed library items were used in 1995 and in previous years, participants who attended presentations that were based on materials borrowed from the library were included in NET program outreach.

Efforts to Promote the Library Outreach

In order to increase circulation and provide services to NET's wide range of target populations, the NET library initiated several new activities. Since December 1992 lists of new additions to the library collection were mailed quarterly to patrons who used the library in the past two years. Information on the library and a bibliography of sample library materials were mailed as part of a NET outreach package to school food service personnel, school superintendents, PTA presidents, child care centers, day home sponsors, and contractors of the breakfast, lunch and special milk programs.

In August 1993 the audiovisual materials catalog was revised. In August 1994 the printed materials catalog was revised. To make them more user friendly, the catalogs were divided into five chapters based on suitability of material to different target populations. The five chapters are: (1) child care--which includes materials on subjects such as feeding, nutrition, hygiene, menu planning, and prenatal care; (2) elementary--which includes materials on subjects such as digestion, cookery, exercise, and weight control; (3) high school--which includes materials on subjects such as sports nutrition, eating disorders, obesity, and pregnancy; (4) food service--which includes materials on subjects such as food safety and sanitation, quantity cookery, kitchen operations, and management

techniques; and (5) general adult--which includes materials on subjects such as basic cookery, healthy diets, fitness, weight management, aging, and diabetes. In 1995 a supplement to the audiovisual catalog was developed to include the new library acquisitions.

In 1993 a slide-tape presentation was developed on the library collection and library services. The presentation was used in NET workshops and conferences during FFY 1995. In addition, two articles were published about the NET library and information on the library was provided in NET exhibits and presentations. To promote children's material and increase children's participation, a story time for children was initiated.

Lending Library Participation

Material Circulation

In 1995 a total of 133 data base searches were conducted by the NET librarian for NET library patrons compared to 137 searches in 1993 and 149 in 1994. Six hundred sixty-one patrons used the library in 1995 compared to 450 in 1993 and 543 in 1994. The 21.7% increase in the number of patrons in 1995 and the 20.7% increase in their number in 1994 was due to the exceptional efforts mentioned above to promote the library. Walk-in patrons increased from about one a week in 1993 to over two a day, bringing in-house use to 354 items. Figure 5 illustrates monthly circulation of the library collection during the past three years.

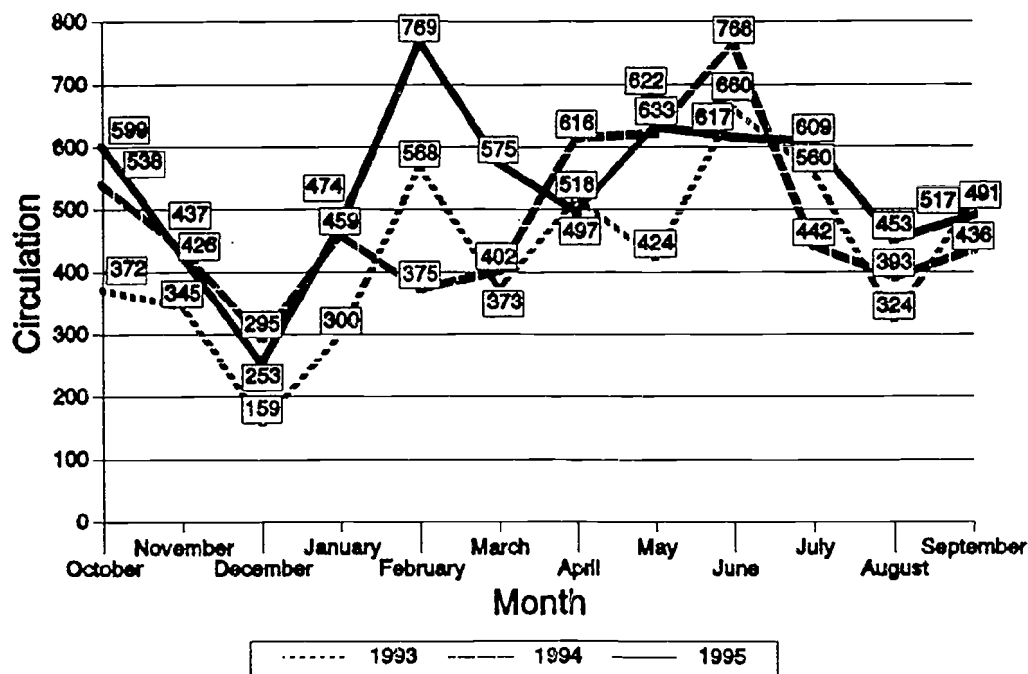


Figure 6. Monthly Circulation of Library Materials in the Past Three Years

It is apparent from Figure 6 that overall circulation of the library is on the rise from one year to another in spite of monthly fluctuations. The total library circulation increased from 5,120 items in 1993 and 5,781 in 1994 to 6,396 in 1995. The increase in library circulation in 1995 was 25% over 1993 and more than 10% over 1994.

The busiest time for library circulation is during the months of October, February, May, June, and July. This time coincides with accelerated school activities and food service training. Circulation is relatively slow during the rest of the year, especially in December, which allows time for planning and development.

Themes of Circulated Materials

Table 4 lists themes of circulated library materials in the order of their circulation in 1995.

Table 4**Themes of Materials Circulated in FFY 1995**

Theme	Frequency	Percent
Food Service Management	1,058	40.5
General Nutrition	534	20.4
Child Care Health and Nutrition	226	8.7
Preschool/Elementary	234	9.0
General Cookery	168	6.4
Secondary Health Education	152	5.8
Children's Materials	148	5.7
Physical Fitness/Sport	68	2.6
Elderly Health Education	24	.9
TOTAL	2,612*	100.0

* Note. Total number of completed feedback forms.

As shown in Table 4, the main theme of the circulated library materials in 1995 was food service management/training, the theme of about 40% of the library items circulated in 1994 and the previous three years. The NET library served as the clearinghouse for in-service training courses provided by TEA and TSFSA to food service personnel.

As mentioned above, NET initiated a children's story time in 1994 to promote the use of children's books. This effort boosted the use of children's books from 3.7% of the circulation in 1993 to 8.0% in 1994. This effort faltered in 1995 due to difficulties in arranging for children's transportation from child care facilities to the NET library.

Types of Circulated Materials

Table 5 lists types of circulated materials in the order of their circulation in 1995.

Table 5

Type of Library Materials Circulated in FFY 1995

Type of Material	Frequency of Circulation	Percent
Videotape	2,122	81.2
Book	283	10.8
Curriculum Guide	90	3.4
Children's Books	78	3.0
Puppet	18	.7
Film	7	.3
Slides	6	.2
Teaching Aid	3	.1
Reference	3	.1
Filmstrip	1	.0
TOTAL	2,612	100.0

As Table 5 indicates, videotapes constituted the majority (81.2%) of circulated materials in 1995. This same trend was dominant in previous years. Using the NET library as a clearinghouse for relatively expensive and rare audiovisual materials emphasizes the important role the NET library plays in the area of nutrition education and training. Book circulation, improved from 5.9% of the circulation in 1993 to 10.6 in 1994 and 10.8% in 1995, possibly due to updating and distributing the print catalog in 1994.

Use of Circulated Materials

Figure 7 shows who viewed or read borrowed library items.

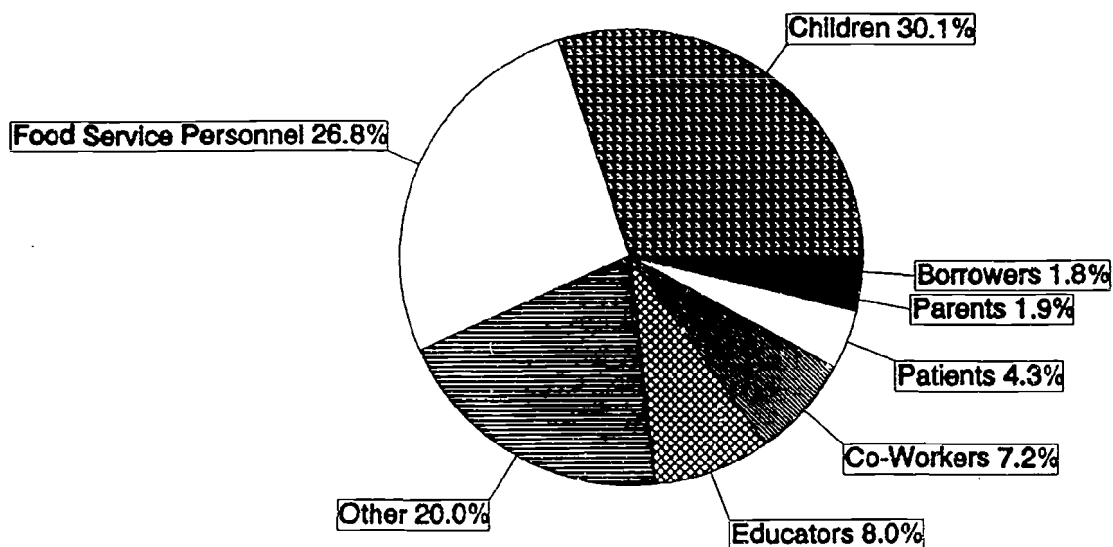


Figure 7. Viewers/Readers of Circulated Library Materials

The information in Figure 7 supports the assumption that borrowed library materials were used by the borrowers to educate/train other individuals. Children (30.1%) and food service personnel (26.8%) topped the list of those who viewed or read the borrowed materials. Using borrowed library materials in group settings considerably increases NET outreach and the cost benefits of NET library services. Other groups who benefitted from the NET library were educators, patients, and parents, in that order. Only 1.8% of the borrowers used the materials themselves.

Functions of Library Borrowers

Figure 8 shows the main function of library borrowers.

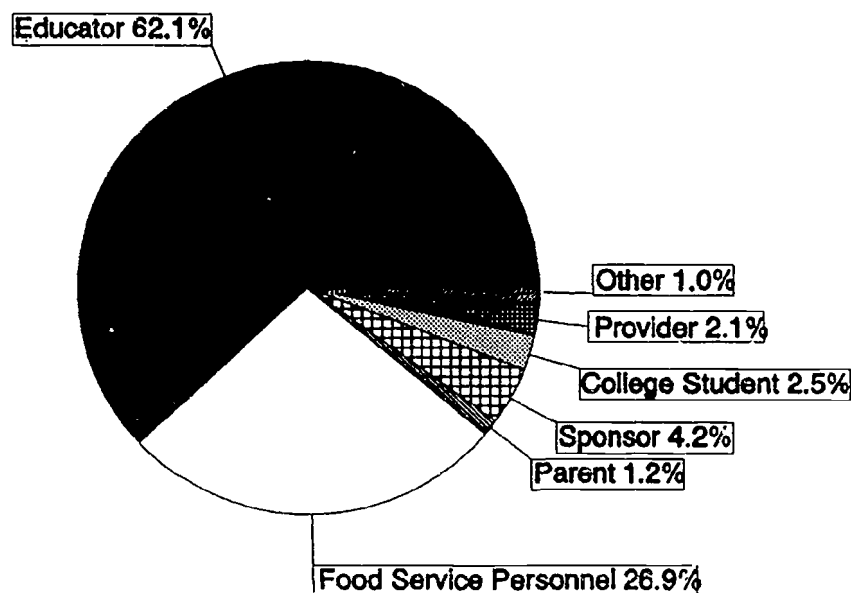


Figure 8. Functions of Library Borrowers in FFY 1995

Figure 8 indicates that the majority of library borrowers were educators (62.1 %) and food service personnel (26.9%). Other borrowers were mainly food program sponsors, college students, providers and parents. Thus, it is plausible to assume that the NET library is used mostly by NET target populations; namely, educators, food service personnel, parents, and food program sponsors.

Work Facilities of Library Borrowers

Information on the work facilities of library borrowers is useful in planning library outreach. This information points to the facilities that have already been reached and need follow-up and updates, and the facilities that were not reached and may be unaware of library services related to their function. Figure 9 represents work facilities of the library borrowers in 1994.

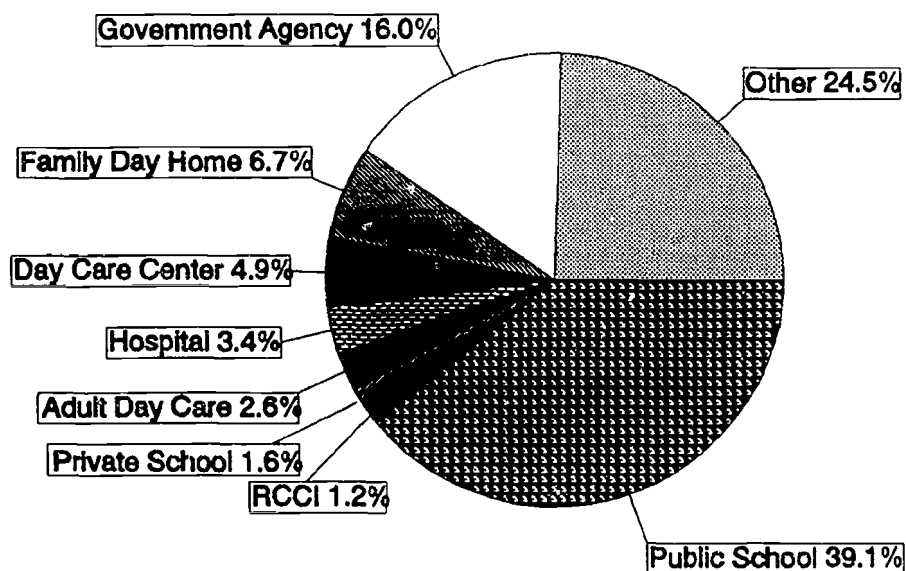


Figure 9. Facilities of Library Borrowers in FFY 1995

Figure 9 shows that the most frequent borrowers (39.1%) worked in public schools. The percentages of borrowers from Family day homes (6.7%) and day care centers (4.9%) rose from 10.6% in 1993 to 11.4% in 1994, and 11.6 in 1995, indicating increased efforts to reach these facilities and a need to continue these efforts. The rest of the circulated materials were used in other NET interventions and by government agencies, hospitals and clinics, colleges, elderly care, associations and airlines. The 1995 goal for

library participation was set at 3,600 individuals--1,440 for public school populations, and 2,160 for other populations. The number of children reached by educators and food service personnel in public schools was 18,789, about 18 times the goal set. The number of public school educators, who saw the library materials was 844 and the number of food service personnel was 15,373. On the other hand, the number of children reached in child care facilities was 956, the number of day care providers who saw the library materials was 2,475, and the number of food service personnel was 182. Thus, a total of 3,613 individuals were reached from child care facilities, exceeding the goal of 2,205. Library outreach to child care facilities, however, was far less than its outreach to public school populations. It must be mentioned that Library outreach to child care facilities improved significantly (35.1%) over 1994.

Evaluation of Borrowed Library Materials

The library feedback form included items that asked the library borrowers to rate the content of the materials they borrowed, the way the content was presented, and how useful the materials were to those who saw it. Figure 10 shows these ratings.

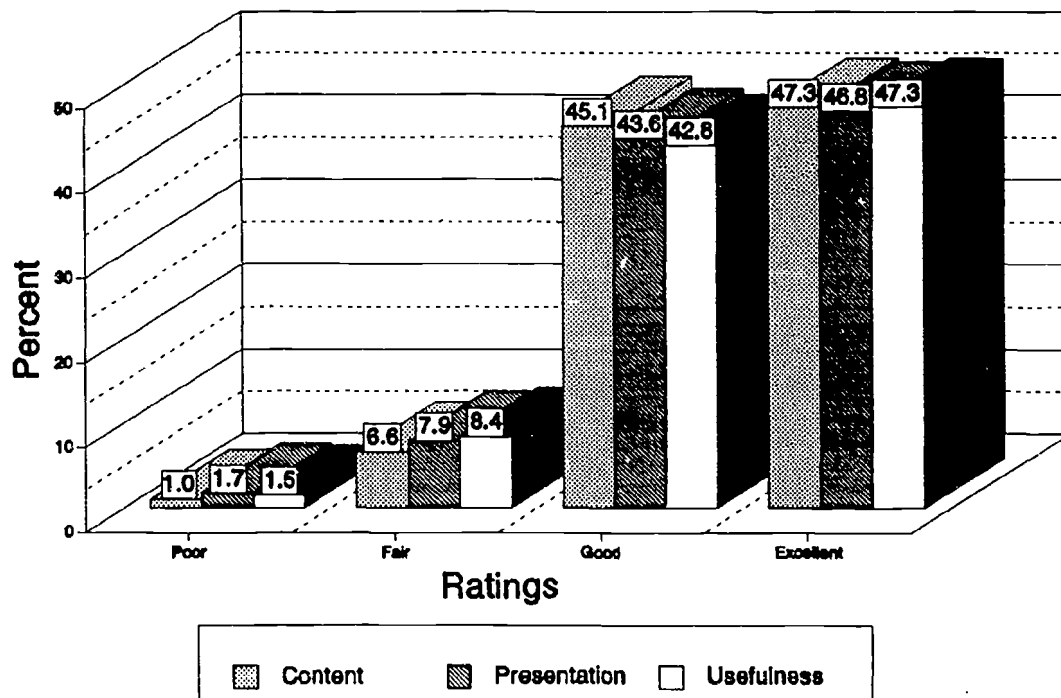


Figure 10. Borrower Evaluation of Library Materials in 1995

Figure 10 illustrates that between 47.3% and 46.8% (about half) of the circulated library collection was rated *Excellent* in content, presentation, and usefulness. Over one-third of the circulated materials were rated *Good* in content, presentation, and usefulness (45.1%, 43.6%, and 42.8% respectively). Less than 1.7% of the circulated materials were rated *Poor* in either content, presentation, or usefulness. These ratings are higher than previous years. The reason for these relatively high ratings may be due to the process followed in evaluating library acquisitions. NET contract trainers review each item and evaluate it before adding it to the collection, using an evaluation form that consists of both open ended and scaled items. The Appendix of this report contains a copy of the NET Library Material Evaluation Form. In addition, the entire collection is evaluated periodically and outdated items are purged. Thus, the quality of the borrowed items should encourage library borrowers to continue using the library, and the themes of the library collection seem to suit children and other target populations in schools and child care facilities.

Sources of Information About the NET Library

To encourage use of the collection, a catalog of printed materials and another catalog for audiovisual materials were compiled in 1984. Since the collection is in constant updating and growth, a revised audiovisual catalog was compiled and produced in 1990 and a revised catalog of printed materials was compiled and produced in 1992. As mentioned above under "Efforts to Promote the Library Outreach," another audiovisual catalog was compiled and produced in 1993, and another print materials catalog was produced in 1994. In 1995, 2,359 copies of the catalogs were distributed to schools and child care facilities, about three times the number of catalogs (655) distributed in 1993 and 22% more than 1994. Library acquisitions (716) were 49.5% more than 1994 acquisitions.

Figure 11 shows how library borrowers knew about the NET library and its services in 1995.

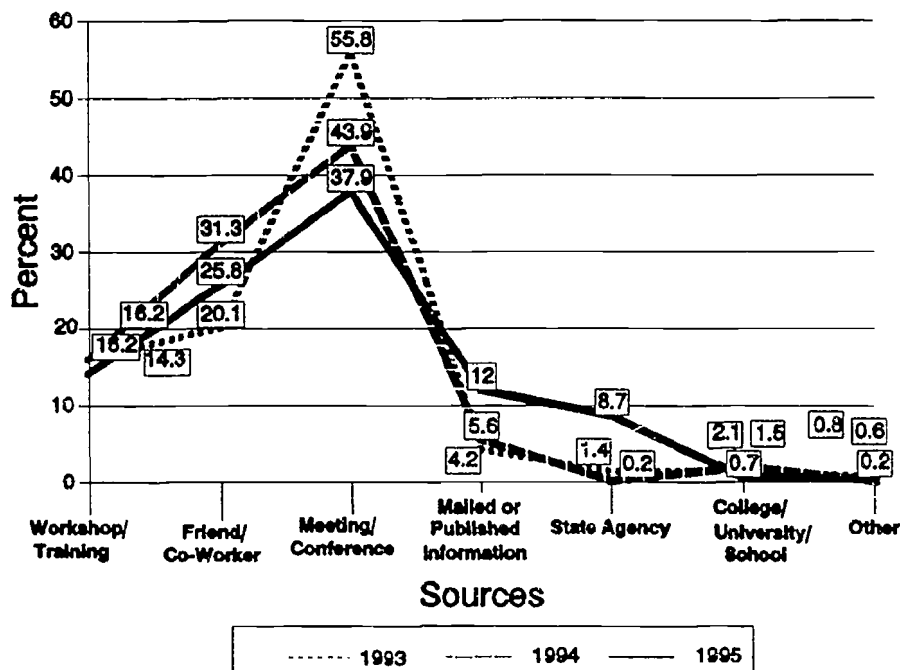


Figure 11. Sources of Information About the NET Library in the Past Three Years

It is apparent from Figure 11 that in the past three years professional meetings were the most frequent source of information about services of the NET library, followed by borrower's friend or co-worker, followed by information the borrowers received in workshops and other forms of training. In 1995 the number of library borrowers who knew about the library from mailed or published information or from College/University announcements increased substantially. Other sources of information fluctuated but remained basically similar to 1993 and 1994.

To continue to enhance library outreach to target groups in schools and child care facilities, NET should continue to publicize its library services in professional meetings. In 1995 more efforts were directed to mailed or published information by distributing more library catalogs. Presentations on library services and reviews of new or basic library items that are available for specific groups or organizations, especially to day care

centers and family day homes, should continue as avenues to extend the library services to these groups.

The Effect of Coordination With TSFSA On Library Circulation

Early in 1990 NET and TSFSA agreed to use the NET library as a major clearinghouse for all training certification courses delivered statewide to members of TSFSA during the months of July and August. The NET library, in return, received a stipend to purchase new videotapes and add them to its collection. This coordination of efforts resulted in an increase in NET library circulation of food management/training materials since 1990.

As a result of the successful coordination between NET and TSFSA, a similar agreement occurred between these two agencies in FFY 1995. The NET library provided TSFSA with a list of materials on food management/training and helped clarify the content and use of these materials by providing appropriate annotations. TSFSA reviewed these materials and identified the items that would be useful in their summer certification training. TSFSA also provided the NET library with a list of additional materials to be purchased with library funds, to support the TSFSA training.

The total number of feedback forms returned by users of the NET lending library in FFY 1995 was 2,612. Over one fifth (20.8%) of these forms were completed by participants in food service training compared to 17% of these forms in 1994.

Development and Distribution of Instructional Materials

Introduction

As a relatively small program, NET relies heavily on ready-made instructional materials in nutrition education and food service management. However, NET's efforts in education and training are not limited to information dissemination. Curricula for 27 workshops were developed and revised regularly during the past 10 years to meet the recent advances in knowledge and methods of instruction, and to increase content congruence with Federal and State policies and regulations.

In addition to workshop curricula, regular evaluations of NET activities pointed to needs to develop certain instructional materials such as recipes, cycle menus, brochures, and

handouts. Some of these materials were translated into Spanish to meet the needs of the large Hispanic population in Texas. Coordination with other nutrition and public health programs also resulted in identifying needed instructional materials.

Generally, when ready-made instructional materials were not available to realize NET's goals and objectives, the NET staff developed needed instructional materials or revised and adapted available materials. Sometimes, NET's contract trainers participated in material development. When development efforts required skills, equipment, and/or time beyond staff boundaries, NET contracted with other public or private institutions for development of the desired material.

Material Development

Workshops

Workshop development and revision accelerated in 1995. NET contract trainers developed four workshops and revised two. The NET Project Coordinator collaborated with the Texas affiliate of the AHA to develop one workshop, bringing the number of workshops that were either developed anew or revised to seven.

Menu Planning - Part I

This workshop is a new version of a NET workshop developed in the eighties titled: *Menu Planning and Kitchen Economy*. The purpose of the workshop is to provide information about the principal concepts and procedures for planning nutritious and economical meals for children and to provide hands-on experience in developing menus. The workshop lasts 4 hours. It targets food service personnel in child care facilities. The main topics of the workshop are: (a) meal pattern requirements, (b) leader nutrients and the Food Guide Pyramid, (c) how to develop and evaluate menus, and (d) planning a five-day menu.

Menu Planning - Part II

Like the above workshop, this workshop is a new version of a NET workshop developed in the eighties titled: *Advanced Menu Planning*. The purpose of the workshop is to develop advanced menu planning skills in the areas of cultural awareness and recipe modifications to meet the U.S. Dietary Guidelines. The workshop lasts 5 hours and targets food service personnel in schools and child care facilities. The main topics of the workshop are: (a) requirements of menu planning and the Food Guide Pyramid, (b) planning menus that are sensitive to the various cultural backgrounds of children, (c) how to revise recipes to adhere to the U.S. Dietary Guidelines, and (d) developing a three-week cycle menu.

Planning Nutritious Snacks

This workshop is an update of an old version by the same name. The purpose of the workshop is to provide information on planning tasty, nutritious snacks which meet CACFP snack regulations and the Dietary Guidelines for Americans. The workshop lasts 4 hours. It targets food service personnel, coordinators and educators who are responsible for providing snacks at facilities participating in one or more of the USDA CNP. The main topics of the workshop are: (a) importance of snacks in the child's diet, (b) CACFP snacks requirements, (c) Dietary Guidelines for Americans, and (d) how to include children in the preparation of snacks.

Kitchen Math

This workshop is a new version of a workshop developed in the eighties titled: *Kitchen Math and Food Purchasing*. The purpose of the workshop is to provide information about the basic math skills so that the correct amounts of food are purchased for the number of children and adults participating in the CACFP. The workshop lasts 6 hours. It targets contractors and food program monitors of schools and child care facilities. The main topics of the workshop are the basic math skills namely fractions, decimals, addition, subtraction, multiplication and division, and how to use these skills to purchase the amount of food needed to meet program requirements.

Project 2001/Health Star

As mentioned previously, this workshop is a collaboration of the Texas Affiliate of the AHA's *Health Star: Guidelines for Healthy School Meal Planning* and the Southwest Region of the USDA Food and Nutrition Service's *Project 2001: Nutrition for a New Century*. The purpose of the workshop is to provide nutrition knowledge and improve food choices which are consistent with the U.S. Dietary Guidelines. The workshop lasts 2.5 hours. It targets school food service directors and managers. The main topics of the workshop are: (a) Food service techniques and tips, (b) quantity recipes that have been tested and analyzed for nutrient content, (c) suggested menus, (d) guidelines for involving parents and the community, and (e) proven promotional ideas.

Off to a Good Start for Family Day Homes

This workshop is a revision of two workshops developed in the eighties titled: *Off to a Good Start for Family Day Care*, and *Meal Pattern Requirements for Family Day Home Sponsors*. Focus on this workshop increased in 1994 when the Program Development Section of the SNP decided to enforce the federal policy that requires day home sponsors to provide training in nutrition for the providers they sponsor and mandate sponsors to attend this workshop as part of their licensing procedures. Thus, the purpose of the workshop is to provide day home sponsors with training and nutrition education materials to familiarize licensed home providers on basic nutrition concepts, basic sanitation and health practices and preparation of nutritious snacks and menus that meet CACFP guidelines. As it is intended that day home sponsors use this training for day home providers, the workshop also prepares sponsors on basic methods of training their providers. The workshop lasts 6 hours. The main topics of the workshop are: (a) adult learning, (b) basic nutrition, (c) menu planning, and (d) sanitation and health. A section of the workshop is developed as a training package to be used by the sponsors to train their providers. This training package was translated into Spanish to be used by the sponsors of Spanish speaking day home providers.

Guidelines for Selecting Creditable Foods and Beverages:

This workshop was developed in 1992. It was revised in 1994 and 1995. It provides participants with information about the USDA meal patterns, creditable foods, and *USDA*

Food Buying Guide for Child Nutrition Programs. The workshop lasts 5 hours. It targets contractors and program monitors of child care facilities participating in Child Care Programs. The main topics of the workshop are: (a) how to plan nutritious meals which meet the meal pattern requirements, (b) nutrition labeling, (c) the USDA Food Buying Guide for CNP, and (d) creditable foods and beverages.

Instructional/Promotional Materials

Two videos and two brochures were developed by NET in 1995. *Feeding Children Well* is a 17 minute video that incorporates current nutrition research, USDA's Food Guide Pyramid and commonly accepted principles of early childhood development. It targets parents of preschool children, day home sponsors and day home providers. The video is used with the *Off to a Good Start for Family Day Homes* workshop mentioned above and is also available in Spanish.

Hey, What's Cookin? is a 35 minute video. It emphasizes successful marketing strategies used by six Texas ISD food service directors to market the USDA food programs to high school students. The high schools featured in the video vary in size and number of students eligible for free or reduced-price meals. The video targets school food service personnel, principles and superintendents.

A brochure titled: Choose Calcium was developed to explain the importance of calcium in one's diet and to list sources of calcium rich foods. The brochure specifically targets teen-age girls.

A brochure titled: Snack Smart was developed to promote healthy snack choices. It targets the general public and provides a list of better snack items with less fat.

To provide information on the NET program in general, the NET Nutrition Hotline was initiated in 1992 and upgraded and transferred to NET's new location in 1993. Callers were able to access the Workshop Coordinator directly. Call receivers were able to transfer incoming calls to any SNP staff member if the caller requests information that is better provided by that staff member.

In 1994 and 1995 two additional lines were added, one for workshop contract trainers to reach the Workshop Coordinator directly, and the other for workshop participants to get a list of weekly scheduled workshops and their locations. An apple shaped magnet inscribed with the NET hotline number was developed to promote the hotline.

Material Distribution

Each workshop participant received a material package that included the workshop workbook and the handouts that were used during the workshop. In addition, NET produced copies of instructional materials that were developed by NET or other sources and distributed these materials, upon request, to NET target populations and other individuals, groups, or organizations interested in nutrition and nutrition education. Table 6 lists the instructional/promotional materials NET distributed in 1995.

Table 6

Instructional/Promotional Materials Distributed During FFY 1995

Material	Producer	Number
Brochures		
Food Guide Pyramid	USDA	1,416
Temperatures for Food Safeness	TX NET	11
10 Tips to Healthy Eating for Kids	ADA	7,290
ABC's of Children's Nutrition	ADA	268
Dietary Guidelines for Americans	USDA	107
Dietary Guidelines for Infants	Gerber Products	89
Fat Facts	TX NET	58
NET	TX NET	1,540
Project 2001	TX NET	341
Recommended Dietary Allowances	USDA	30
Sports Sense	Rice Council of America	172
Texas NET Workshops	TX NET	19
Total Brochures		11,341
Catalogs & Bibliographies		
Audiovisual Catalog		
Print Catalog	TX NET	923
NET Library Materials in Spanish	TX NET	1,406
Total Catalogs & Bibliographies	TX NET	30
		2,359

(Table 6 continued)

Material	Producer	Number
Handouts		
Apple Magnets	TX NET	1,178
Breakfast & Snack Basics	TX NET	63
Building for the Future	USDA	5,171
Cycle Menus for Centers & Day Homes	TX NET	164
Daily Food Guide Pyramid	TX NET	3,417
Day Care Nutrition in a Nutshell	TDHS	3,924
Earl E. Bird Stickers	TX NET	805
Economy in the Kitchen	TDHS	6
Ethnic Recipes for CCC's and FDH's	TX NET	425
Fat Calculators	TX NET	481
Fat Facts	HEALTH EDCO	1,405
Feeding Infants - A Guide For Use in the CCFE	USDA	24
Food Buying Guide for Child Nutrition Programs	FNS	73
Library Bookmarks	TX NET	190
Library Invitation Card	TX NET	26
Making Bag Lunches, Snacks & Deserts	FNS	56
Making Healthy Food Choices	USDA/USDHHS	733
Planning Guide for Food Service in Child Care Centers	FNS	8
Preparing Foods and Planning Menus	FNS	65
Quantity Recipes for Child Care Centers	TX NET	62
Quantity Recipes for School Food Service	USDA	14
Shopping for Food & Making Meals in Minutes	FNS	<u>56</u>
Total Handouts		18,346
Information Packets		
Breakfast	TX NET	44
NET Workshops	TX NET	59
Snacks	TX NET	73
Sports	TX NET	3
Project 2001/Health Star		<u>2,873</u>
Total Information Packets		10,052
Outreach Letters		
To Parents	NET	3,000
To TSFSA	NET	800
To Texas Child Care	NET	<u>800</u>
Total Outreach Letters		4,600

(Table 6 continued)

Material	Producer	Number
Posters	TEA	797
Blast Off	TX NET	916
Earl E. Bird	TX NET	26
Project 2001	TX NET	571
Totally Fabuloso	USDA/NSLP	16
Troy Aikman Knows School Lunch		
Total Posters		2,326
Videos		
Breakfast Advantage	TX NET	5
Breakfast Party PSA	TX NET	2
What's Cookin'? Recipes for a School FS Revolution	TX NET	3
Total Videos		10
Workshop Packets		
Sanitation and Health	TX NET	341
Kitchen Math	TX NET	7
Menu Planning Part I	TX NET	1,029
Planning Nutritious Snacks	TX NET	644
Off to a Good Start	TX NET	285
Guidelines for Selecting Creditable Foods	TX NET	702
Nutrition and the Preschool Child	TX NET	297
Puppets in Nutrition Education	TX NET	71
Project 2001/Health Star	TX NET/AHA	372
Total Workshop Packets		3,748
GRAND TOTAL		

Table 6 indicates that NET produced and distributed 62 instructional/promotional materials a 50% increase over 1994. A variety of the distributed materials (videotapes, audiotapes, brochures, handouts) were designed to directly instruct children in nutrition and good eating habits. In addition, recipe cards, menus, and food regulations were distributed to help food service personnel plan nutritious meals. Several brochures and information packets were developed and distributed to promote the NET program and its services. Catalogs and bibliographies were distributed to promote the NET library collection.

As mentioned above, each workshop participant received a material packet that included the workshop workbook and handouts used during the workshop. Thus, 3,748 workshop

packets were distributed to workshop participants. Outreach letters were mailed to administrators of schools, child care facilities, food service managers, and food program contractors to inform them of the NET program and its services. Bibliographies of sample library materials and workshop and presentation synopses were attached to the letters.

In 1994 NET distributed 19,079 materials, a substantial decrease from the previous two years. The reason for this decrease was the type of material distributed and a change in workshop policy. NET concentrated on distributing packets of information and stopped routine mailings of materials to the facilities of workshop participants. In 1995, the number of distributed materials (52,782) surged once more, reaching about three folds their number in 1994. This increase was in almost all types of distributed materials except bibliographies, outreach letters and workshop packages.

Presentations, Exhibits, and Publications

Introduction

Presentations, exhibits, and publications are developed and delivered by the NET staff and contract trainers and are used to: (a) publicize the program and its services, (b) increase participation of the target populations, and (c) promote exchange of ideas and information with concerned professionals.

Starting in 1992 an increasing number of presentations and exhibits were sponsored by NET and delivered by the contract trainers in their respective locations. NET enlisted the contract trainers in these efforts to save on travel money while accelerating the number of presentations and exhibits delivered throughout Texas. Standard exhibits and presentations are being developed to provide contract trainers with the necessary information and materials. In 1995 five exhibits were developed by DHS Media Services to promote NET workshops, NET library, Project 2001, Padres Hispanos en Accion and NET in general.

A standard form was used to collect data on participants in presentations delivered to adult audiences. Two items on the form were designed to find out if the purpose of a presentation was clear to the participants and if the content was relevant. Another form was used to collect data on children participating in classroom presentations. Copies of these two forms are included in the Appendix.

Presentations

Table 7 lists titles of presentations that were given by NET staff in conferences, their locations, dates, and the groups that attended these presentations.

Table 7

NET Conference/Meeting Presentations During FFY 1995

Presentation	Conference/Meeting	Duration	Location	Date	Audience
The Importance of Breakfast	Department of Agriculture's Food and Fiber Pavilion	Two 30 min.	State Fair Dallas, Texas	October 11, 1994	Children & Parents
Solving the Nutrition Puzzle...Building Strong Healthy Minds and Bodies	Annual Conference of Texas Association for the Education of Young Children	1 hour & 15 min.	Corpus Christi, Texas	October 21, 1994	Educator
Comprehensive Needs Assessment as Basis for Equitable Distribution of Services to Varied Target Populations	Annual National Conference of the American Evaluation Association	30 min.	Boston, Massachusetts	November 3, 1994	Research Professors & Program Administrators
Pre-School Nutrition	Annual Conference of Texas Licensed Child Care Association	Two 1 hour	Dallas, Texas	November 4 & 5, 1994	Child Care Sponsors & Managers
Texas...Eating Right Feeling Great	Annual Conference of Texas Association for Health, Physical Education, Recreation and Dance	1 hour	Austin, Texas	December 1, 1994	Educators
Nutrition Education & Training Needs for Home Economics Teachers	National Association of Teacher Educators of Vocational Home Economics	Poster Sessions	Dallas, Texas	December 9, 1994	Program Managers & University Professors

(Table 7 continued)

Presentation	Conference/Meeting	Duration	Location	Date	Audience
A Comparison of the Nutrition Behavior of Children with the Dietary Guidelines	77th Annual Conference of Texas Association of Family and Consumer Sciences	1 hour	San Antonio, Texas	March 4, 1994	Program Managers & University Professors
Marketing for Managers	Annual Conference of Texas School Food Services Association	1 hour	El Paso, Texas	June 14, 1995	Food Service Managers
How Do They Measure Up - An Evaluation of Nutrition Knowledge and Attitudes of School Age Children in Texas	Annual National Conference of the American Association of Family and Consumer Sciences	Poster Session	New Orleans, Louisiana	June 26, 1995	Program Managers, University Professors
Assessing the Compliance of School Food Service Menus With Current Required and Recommended Standards	Annual National Conference of the American School Food Service Association	15 min.	Anaheim, California	July 25, 1995	Food Service Managers, University Professors
Involving Stakeholders in the Nutrition Education and Training Program Evaluation	Annual Conference of the National Association of Welfare Research and Statistics	30 min.	Jackson Hole, Wyoming	September 11, 1995	Evaluators, Programs Managers and University Professors
Fiscal Year 96 NET Workshops Update	Semi-Annual Meeting of Special Nutrition Programs	3 hours 30 min.	Austin, Texas	September 12, 1995	Staff of Special Nutrition Programs

Data in Table 7 indicate that a total of 12 presentations were given to different target populations and professional groups compared to 8 in 1994. Presentation topics included the NET program, nutrition, and program evaluation. Five of these presentations were given in national conferences compared to 4 in 1994. An estimated 80 educators, 250 parents, 375 food service managers and 400 university professors and program managers and evaluators attended these presentations.

In 1995 NET contract trainers delivered 5 different presentations that they modified from NET workshops or developed anew. The number of presentations in 1995 decreased sharply from 1994 and 1993. A total of 6 presentations were delivered to educators, parents, food service personnel and administrators, compared to 35 presentations in 1994 and 32 in 1993. Table 8 lists these presentations and the number and percent of participants.

Table 8

**Number and Percent of Participants in Presentations Delivered
by NET Contract Trainers**

Presentation	Number of Times Conducted	Number of Participants	Percent of Participants
Food for Thought	2	78	53.0
Nutrition	1	31	21.1
Project Teach	1	15	10.2
Singapore	1	14	9.5
Growth of Young Children	1	9	6.1
Total	6	147	100%

Table 8 indicates that presentations on general nutrition were attended the most (74.2% of the participants) followed by two presentations on Project Teach and Singapore. The range of presentation topics varied widely. The number of participants in each presentation ranged from 9 to 50. Variation in topics and participants is expected, since these presentations were customized and delivered upon request.

When the presentation participants were asked about the number of children they reached, a total of 13,239 children was mentioned, about 6 times less than 1994 reflecting the sharp decline in the number of presentations and participants. Most of these children (99.7 %) were reached by educators and the rest were reached by parents. Figure 12 compares the functions and facilities of the participants in 1994 and 1995 presentations.

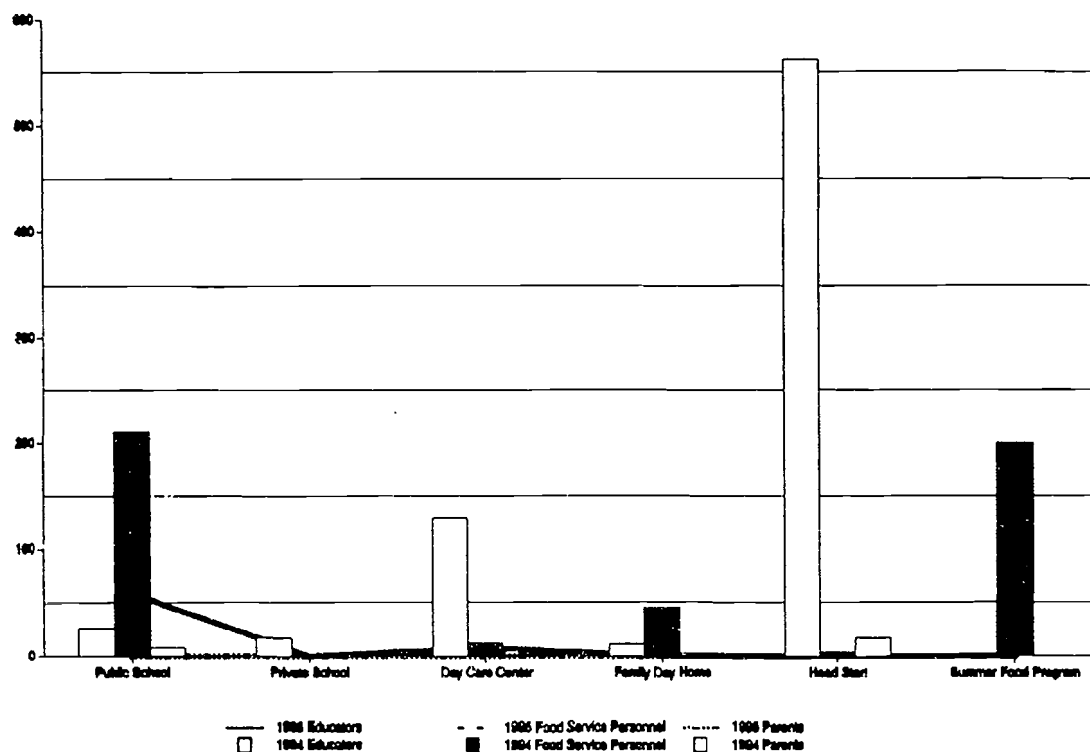


Figure 12. Function and Facility of Adults Participating in Presentations

Figure 12 Shows the general decrease in the number of participants in 1995. The figure indicates that the major decrease was in food service personnel and Head Start educators. The decrease in food service personnel attending NET presentations may be due to lack of coordination with Summer Food Service training delivered by DHS to SFSP sponsors. NET also delivered presentations to Head Start educators at meetings of the Head Start Association in 1994. Training for Head Start educators was provided through NET workshops in 1995. There was 200 participants from the SFSP and 562 participants from the Head Start Program in 1994, over 5 times the number of participants in 1995. In 1994 NET also collaborated with Region 6 and Region 13 Education Service Centers in delivering Project 2001 presentations to food service personnel attending training on the revised USDA Dietary Guidelines for Americans. Two hundred and eleven food service

personnel participated in these presentations. Similar collaboration did not happen in 1995.

The presentation evaluation form included items asking the participants to rate the clarity of the purpose of the presentation and the presentation relevance to their jobs. About 46.9% of the participants filled in this form. All the respondents thought that the purpose of the presentation they attended was clear and 97.1% thought that the presentation was relevant or somewhat relevant to the tasks they performed.

In addition to presentations delivered to adult audiences, the NET staff and contract trainers gave 22 classroom presentations, a 62.7% decrease from 1994. All these presentations were given to public school children. Presentation topics included information on the Food Guide Pyramid, health, and physical fitness. The total number of children participating in the presentations was 1,101, a 43.9% decrease from 1994.

Exhibits

Table 9 includes a list of exhibits and fairs that NET held during FFY 1995.

Table 9

NET Exhibits and Fairs During FFY 1995

Exhibit/Fair	Theme	Date
Texas PTA Conference Fort Worth, Texas	Project 2001/Health Star	November 10-12, 1994
Annual Conference Texas Association for Health, Physical Education, Recreation and Dance Austin, Texas	NET Library	December 1-2, 1994
Texas Elementary Principals and Supervisors Association	NET	December 7-8. 1994
Health and Wellness Fair Mendez Middle School Austin, Texas	National Nutrition Month	March 10, 1995
Annual Conference of Texas School Food Service Association	NET	June 11-15, 1995
Texas Association for School Administrators	NET	July 8-11, 1995
Texas Licensed Child Care Association	NET Library	November 4-5, 1995

Table 9 indicates that NET participated in 7 exhibits and fairs, the same as in 1994 and previous years. Two of these exhibits were held statewide. In 1991 the Texas State Plan set the goal for the number of exhibits and fairs to be held by NET at five. The updated 1993 State Plan did not change this number. Thus, NET exceeded the set goal.

Publications

Table 10 includes a list of NET's publications in FFY 1995.

Table 10

NET Publications and News Releases During 1995

Title	Publications	Date
Final Annual Report of Nutrition Education and Training Needs Assessment Project for FFY 1993	The ERIC Clearinghouse on Teaching and Teacher Education	November, 1994
Final Evaluation Report of Texas Nutrition Education and Training Program for FFY 1993	The RRIC Clearinghouse on Teaching and Teacher Education	November, 1994
NET Workshops for 1995	Lunch Bell, TSFSA Volume 38, Number 3	Spring, 1995
Nutrition Info Just a Call Away	ETC.; The Monthly newsletter for TDHS State Office Employees	March, 1995
More News from the Texas NET Library	Lunch Bell, TSFSA Volume 38, Number 4	Summer, 1995
Nutrition Education and Training Program Model for Evaluation and Planning	Evaluation and Program Planning Volume 18, Number 4	August, 1995

Data in Table 10 reveals that 6 publications were published on NET in 1995 compared to 8 in 1994 and only 3 articles in 1993. Half the publications were on NET evaluation and needs assessment, two were on the NET library and one on NET workshops.

Coordination With Related Publicly Supported Programs

Introduction

Coordinating efforts of the NET program with those of other publicly supported programs with similar functions is based on NET program regulations and is a program goal. This coordination is expected to promote outreach of the NET program and to reduce duplication of efforts and resources.

Coordination efforts take different forms. NET continues to attend and present program outcomes at state and national professional meetings. This interaction allows communication and exchange of information on NET's planned activities and possible avenues of cooperation with other programs. Another direct approach to coordination is submitting proposals for cooperative efforts and offering consultations that are in the realm of NET's expertise. Presentations, exhibits, and publications publicize NET's activities and expertise and open doors for cooperation and coordination.

Coordination Efforts

Southwest Region Food and Consumer Service

Since 1992 NET coordinated efforts with the Southwest Region Food and Consumer Service to promote and implement *Project 2001: Nutrition for a New Century*. In 1992 NET developed a two-hour presentation to inform school food service personnel, educators, and administrators about the benefits of this Project. In 1993 NET augmented the presentation with a 6-minute 40-second video on the Project and a food pyramid table tent. NET also developed a brochure to promote the Project and translated it into Spanish. Three mini-contracts were awarded to school districts to develop innovative nutrition activities on *Project 2001* and the new USDA *Dietary Guidelines for Americans*. NET trainers presented *Project 2001* in training sessions delivered by SNP trainers to NSLP contractors in October and November 1992.

In 1994 NET started to integrate Project 2001 with Healthstar: Guidelines for Healthy School Meal Planning, a guide developed by the Texas Affiliate of the American Heart Association for school food service personnel. A 7 minute "Project 2001/Healthstar" video and a poster were developed. NET also developed 5 table tents on foods promoted by the project. In 1995 further collaboration resulted in a 2.5 hour workshop titled *Project 2001/Health Star*.

NET also supported efforts of the Southwest Region Food and Consumer Service on the Team Nutrition Training (TNT) project. TNT is a USDA school meal initiative to shape the nutrition behavior of the nation's school children and to train school food service personnel to provide meals consistent with the Dietary Guidelines for Americans. NET collaborated with the Southwest Region in kick off activities in one school in Texas. NET had a station to promote the food pyramid, served on the planning committee and video taped the event.

Louisiana, Oklahoma, and Texas (LOT) Coalition:

In FFY 1995 Louisiana, Oklahoma, and Texas formed a coalition to apply for a TNT grant and to implement it. The coalition consisted of NET programs in the three states and the CNP at TEA. The project was called the LOT Team Nutrition Training. The objectives of the project were to determine through a training needs assessment, the curriculum needs of school food authorities to implement the revised NSLP and SBP meal pattern regulations. Based upon the needs assessment, a common set of curricula for training school food service personnel was to be developed and delivered using state of the art technology. LOT was awarded the grant and NET Program Evaluator developed an instrument to assess the training needs of school food authorities. Plans were developed to collect data and develop training in FFY 1996.

Texas Interagency Council on Nutrition (ICON)

ICON, formerly the Nutrition Resource Council, was established as a major statewide cooperative linkage between food and nutrition policy stakeholders as a result of NET's efforts in 1990. The ICON members meet quarterly. The NET Coordinator chaired the Council in 1992 and 1993 and worked with other ICON members to develop a Memorandum of Understanding between the agencies represented by ICON. The Memorandum was issued and implemented in 1993. NET also printed 300 copies of *A Guide to State Agency Nutrition Programs* developed by the Council.

In 1995 NET continued to participate in ICON's quarterly meetings which resulted in the development of food and nutrition goals for Texas. The NET Coordinator chaired the

Food Distribution subcommittee and gave an overview of NET activities. NET also shared the results of the comprehensive assessment of the nutrition and nutrition education needs of Texas school populations that NET conducted as part of the evaluation and needs assessment efforts in 1994.

Texas Affiliate of The American Heart Association (AHA)

In 1992 NET expertise was sought by the Texas affiliate of the AHA school site subcommittee. The subcommittee was tasked to review and make recommendations regarding the *Getting to Know Your Heart* curriculum designed for elementary school students in grades 1-3. The AHA donated copies of their curriculum and training packages to the NET library. NET purchased additional copies for the contract trainers to be used in NET workshops. The trainers were trained on the curriculum as a step toward offering statewide presentations on using the curriculum. In 1993 NET scheduled six presentations statewide and the presentations were delivered by NET contract trainers. NET also continued to serve on the Schoolsite Subcommittee. As mentioned previously, NET also collaborated with this association to merge Project 2001 with the AHA's Health Star, a project also designed to help schools implement the Dietary Guidelines.

Texas School Food Service Association (TSFSA)

Early in 1990, coordination with TSFSA designated the NET library collection as a major clearinghouse for all certification courses delivered to members of this association. This coordination was renewed in 1991, and NET agreed to purchase audiovisual materials to support the certification training statewide. Coordination efforts continued through 1995. NET paid for printing posters designed by TSFSA to promote Texas School Lunch Week and the NET library continued to serve as the clearinghouse for all TSFSA training materials.

Texas Education Agency (TEA)

In 1992 NET and TEA coordinated their activities in a breakfast promotion campaign. NET developed two PSAs, one targeting elementary school students and another targeting teenagers. A poster, two costumes, and two menu-backs were developed to support the PSAs. As part of this campaign, NET produced the *Breakfast Jingle* audiotape and a *Breakfast Advantage* videotape in cooperation with TEA and Associated Milk Producers, Inc.

In 1993 several meetings were held between NET and the Child Nutrition staff of TEA to discuss possible areas of coordination. NET developed two additional "Earl E. Bird" costumes. In addition, NET and TEA coordinated their efforts during the TSFSA National School Breakfast/Lunch Week, Texas School Lunch Week, and Texas School Breakfast Week. NET also disseminated about 750,000 breakfast bags developed by TEA to promote school breakfast during the Texas School Breakfast Week.

In 1994 NET developed the *"Closing the Performance Gap with School Breakfast"* video to continue efforts to promote breakfast. NET contract trainers presented the ESR IV curriculum developed by TEA to teachers and children in grades K-12 in 1994 and 1995.

In 1995 collaboration with TEA expanded to the production and presentation of T Star Network training for National Nutrition Month and Texas School Breakfast and Lunch Week in March. The training topic was Team Nutrition from the classroom to the Cafeteria. The program was designed to promote USDA's TNT project to food service personnel, health specialists and health and science teachers.

In 1995 NET also joined efforts with TEA and the Texas Department of Agriculture in preparing promotional materials and activities for Texas 5 a Day Week in January. In addition NET shared efforts and ideas with TEA on the Managing the Media Conference held in Dallas/Fort Worth during the summer of 1995.

Texas Department of Agriculture (TDA)

In 1991 NET awarded a grant to the TDA to develop materials that promote Texas agricultural products to children in grades K-3. The grant funded production of educational materials to support Project TEACH (Texas Education and Agriculture Cooperating for Health). This cooperation continued in 1992 as NET provided expertise in developing additional materials. In 1994 NET presented project TEACH to teachers and children in grades 1-3 and continued to promote the project in 1995.

The University of Texas at Austin and Southwest Texas State University

In 1995, as in the two previous years, NET provided work experience for two dietetic interns from The University of Texas at Austin. The internship is in partial fulfillment of the requirements of the Coordinated Undergraduate Program of the Department of Human Ecology. The purpose of the internship is to familiarize the students with clinical, public health, nutrition, and nutrition education programs. Each intern spent one day a week for five weeks in the NET program. They delivered presentations to

elementary and secondary school students and participated in material development and evaluation. An internship experience was also extended to a student from Southwest Texas State University in 1995. Her experience with NET totalled 80 hours.

Prairie View A & M University

The Cooperative Extension Program (CEP) at Prairie View A & M University explored a cooperative project with NET. The mission of the CEP is to plan and deliver educational programs focused on limited resource individuals and families utilizing the resources of the land grant system to educate Texans for self-improvement, individual action, and community problem solving. Cooperation between NET and CEP was a spin-off of the USDA Food and Consumer Service's effort to work more closely with the 1890 historically Black Land Grant Institutions. Meetings between CEP and NET representatives in 1995 resulted in an agreement to plan intensive nutrition efforts directed at day care providers, children and parents. The project plans will be laid down in 1996 and will include a strong evaluation component to evaluate project activities and the project as a whole.

The State Agency Libraries of Texas

As in 1994 the NET Librarian was an active participant in SALT during FFY 1995. She scheduled meetings and disseminated NET library brochures to agencies represented by SALT.

Texas Head Start Centers

Collaboration with Head Start Centers was initiated by USDA Food and Consumer Services and the National Head Start Bureau. A Head Start nutrition education project titled *Padres Hispanos En Accion (PHA)* was developed for parents of Hispanic children and announced at the 1993 national NET program meeting in Baltimore. The 20 states with the highest enrollment of Hispanic children in Head Start were invited to participate in the project. The project involves dissemination of instructional materials and training of parents by Hispanic trainers using the culturally specific Spanish language materials developed for work with parents of Mexican American, Puerto Rican or Central American heritage.

In 1994 the NET Coordinator and NET Project Coordinator attended a national training workshop to learn about the materials and develop strategies for providing training and technical assistance to Head Start grantees using the PHA materials. In 1995 NET hired

two Hispanic trainers and developed an instrument to evaluate the training outreach and effectiveness. NET started to provide training to 92 Head Starts in Texas.

Texas Parent Teacher Associations (PTA's)

Yearly evaluation of NET activities revealed that few parents were reached through NET's direct interventions in FFY 1994 and in previous years. It was recommended that NET continue efforts to reach parents in PTA meetings and through their children in schools and child care facilities. In 1995 NET developed a Request for Proposal to promote the Food Guide Pyramid and the Dietary Guidelines for Americans to parents of school children. NET mailed about 3,000 announcements of the RFP to PTA's throughout Texas. Nine mini-grants were awarded to different ISD's and will be implemented in 1996.

Austin Independent School District (AISD)

NET collaborated with AISD in 1995 in developing presentations and exhibits for middle school students during National Nutrition Month. Over 700 students participated in this intervention. The activities were held at Mendez Middle School.

Special Nutrition Programs of Texas Department of Human Services

NET collaborated with the policy section of TDHS Special Nutrition Program on a project to evaluate the Adult Day Care Program. The NET Program Evaluator developed criteria for the food and nutrition services of the program based on the criteria, and surveys for the adult day care directors, sponsors, and contract managers to evaluate the services they provide and assess their education and training needs. A data collection instrument and a standard interview form were also developed to collect data from the adult day care centers and participants to evaluate the nutrition services provided through the program. The NET program evaluator then drew a sample of centers to visit and developed procedures to follow during the visits. She consulted with the Program Development staff on data analysis and reporting.

NET also participated in meetings with other SNP staff and TDHS staff to work on a TDHS Board assignment. The assignment was to determine the impact of removing the rule prohibiting direct ship in distribution of commodities to schools. An opinion survey was developed for recipient agencies, namely school districts.

Summary

Figure 13 summarizes the various target groups participating in the NET program as a result of NET's outreach efforts in FFY 1995.

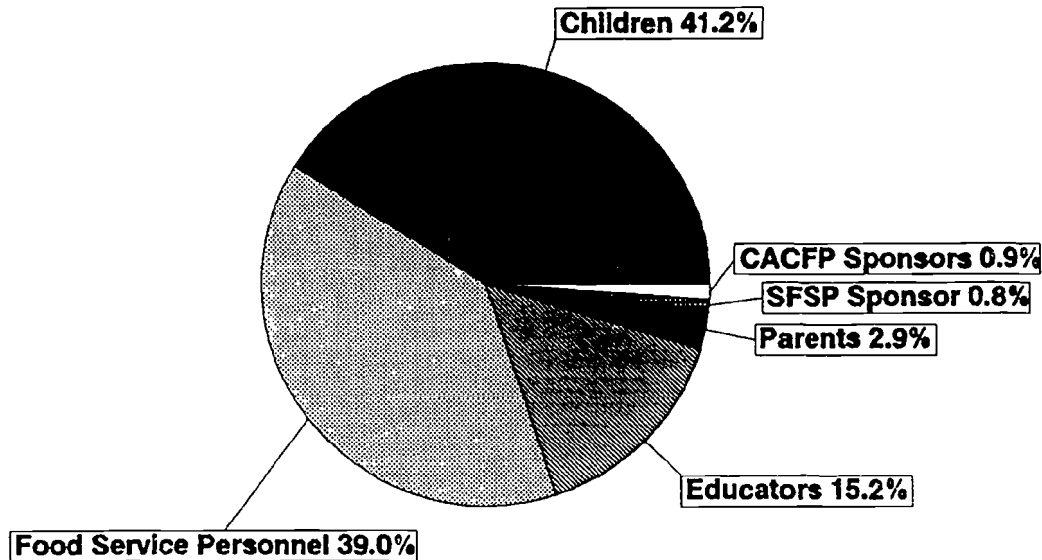


Figure 13. Target Groups Participating in NET Interventions

It may be noted that the number of children cited in Figure 13 represents children reached directly through classroom presentations. In 1995, 1,664,022 children were reached indirectly by adults participating in NET workshops and/or other education and training activities based on NET library materials, compared to 821,407 children in 1994. The reason that the number of children reached indirectly in 1995 was double their number in 1994 was the increased number of food service personnel participating in NET interventions. Food Service personnel reach larger numbers of children than educators or parents.

Recommendations

- Statewide scheduling of NET workshops considerably increased the number of workshops delivered during 1995 while the number of workshop participants decreased. To encourage prospective targets to register in NET workshops NET needs to simplify and automate the procedures of workshop registration. Automated phone registration may replace the current on-line registration. NET should seek the cooperation of a Texas university or a community colleges in using its automated system of registration.
- Research indicates that single workshops could result in a change in knowledge, but changes in attitudes and practices are achieved by more extensive instructions. In 1995 NET developed several workshops on Menu Planning. It is recommended that NET arrange these workshops in two series, one for school food service personnel and the other for pre-school food service. The series should include workshops that provide information basic to menu planning such as kitchen math and creditable foods. These series of workshops would allow for organizing the content in a spiral curriculum that is organized to reinforce main concepts and meet the needs of participants at different levels of competence.
- Most of the workshops offered in 1995 targeted food service personnel. In addition, changes in NET policies required day home sponsors to attend NET workshops in lieu of their providers which further decreased the number of educators participating in NET workshops. It is recommended that NET boosts educators' participation by coordinating teacher training with TEA and the Education Service Centers.
- Since the NET Library circulation to day care centers and family day homes improved considerably in 1995, it is recommended that current promotional efforts directed to these facilities continue. NET could also develop movable exhibits and short presentations on samples of suitable materials to be presented in these facilities.
- Since children's story time efforts are hindered due to difficulties in arranging for children's transportation from child care facilities to the NET library NET may consider conducting storytime in day care centers and public libraries to promote the expanding collection of children's books and audiovisual materials in the library.

- NET needs to maintain mailed and published information about the library collection as an important source of library outreach. Distributing library catalogs, bibliographies, and updates to schools and child care facilities and publishing articles and announcements in magazines and newsletters was an effective means of library outreach in the past and should continue and expand.
- Since few parents were reached through NET's direct interventions in FFY 1995 and in previous years, it is recommended that NET develop and deliver presentations and handouts for parents. NET should continue efforts to reach parents in PTA meetings and through their children in schools and child care facilities.
- Since NET participates in promotional campaigns such as Texas School Breakfast Week and Texas School Lunch Week, the NET library could prepare packages of audiovisual and print materials to support these campaigns as they are held, and provide information to groups and individuals that are interested in learning more about the subjects of the campaigns.
- Due to considerable decline in the number of presentations and participants in this intervention it is recommended that NET review its efforts in this direction. NET's past efforts in developing standard presentations with specific objectives and targets in mind and coordinating these presentations with training provided by other entities such as Head Start, SFSP Sponsors, Early Childhood Intervention and Education Service Centers boosted the number of presentations and participants in the past.
- To reach the few SFSP sponsors in Texas, NET may develop an individualized instruction unit on NET and on basic nutrition concepts that are beneficial to this target population. Simple evaluation instruments should be included in the unit to ensure sponsors' mastery of the unit's content. NET may coordinate the distribution of the unit with the annual training TDHS provides for the sponsors, and augment the unit with exhibits and brochures.
- NET should continue its enhanced efforts in publications to inform the public of NET program services and share experiences and ideas on nutrition education and evaluation with professionals. Regular announcements on NET activities and services may be shared with newsletters aimed at NET target populations.
- NET's diligent coordination with related publicly-supported programs resulted in measurable increases in participation and in contributions state and nationwide.

This coordination should continue and should be extended to commodity and food distribution programs, and to related non-profit community organizations.

III. REPORT ON THE PROJECT: AN ASSESSMENT OF NUTRITION EDUCATION AND TRAINING NEEDS IN TEXAS

Introduction

Importance of the Project

Texas was one of the first states in the nation to implement the NET program in 1978. With a population of approximately 17.7 million, it is imperative to provide nutrition information and instructional resources for over 4.8 million children and for key individuals involved in their learning environment, including parents or guardians, caregivers, educators, and food service personnel.

Nutrition education enhances efforts to provide nutritious and healthy food for Texas children. In 1990 Texas spent approximately \$13 billion of its total revenue on public school education, of which over one-sixth (\$702,835,220) went into feeding school children. About 40% (1,221,956) of these children applied for and were eligible to receive free or reduced-price meals based on their family income. Similar efforts and resources are directed to feeding children at their homes and in child care facilities. The goal of the NET program is to increase the likelihood that these efforts and resources result in improving the nutritional status of Texas children.

Ethnicity is another factor affecting child nutrition in Texas. In 1989 TEA surveyed ethnicity in Texas public schools. The results showed that 50.2% of the children were White, 33.1% were Hispanic, 14.7% were African American, and the rest were Asian and American Indian. The percent of Hispanics in individual schools ranged from 0% to 100%, and the percent of African Americans ranged from 0% to 68.2%. This cultural diversity makes the task of providing nutritious food appealing to different ethnic groups quite difficult, and requires that nutrition education and training be tailored to different ethnic dietary habits.

To tailor NET program activities to the needs of the above mentioned populations, NET develops and implements yearly evaluation plans. The results of the evaluations are used to improve the ongoing activities of the program and to adjust the program's objectives for the following years. The regulations governing NET specify needs assessment as a

systematic process for delineating the scope, outreach, and success of the program's activities.

Previous Needs Assessments

In 1979 NET assessed the nutrition education and training needs of Child Care Food Program providers in day homes. NET conducted another needs assessment during 1985 to determine the nutrition education resources and interests of public school teachers and food service personnel. A study was conducted in 1986 to determine the resources available to 29 state agencies interested in nutrition education and training and to assess their need for improved coordination. In 1988 NET assessed the needs of food and nutrition program personnel within TDHS so that appropriate materials would be made available to them in the NET library collection. A statewide comprehensive assessment of the nutrition education and training needs of the program's target populations, however, was not conducted.

Project Benefits

There are several federal, state, and community agencies that are concerned with nutrition education and training in Texas. For example, the food assistance and food distribution programs administered by TDHS, the nutrition programs administered by Women, Infants and Children (WIC) at the Department of Health, and the CNP administered by TEA. The missions of these agencies are interrelated and coordination among them would help avoid duplication of effort and allow sharing of resources. Due to insufficient funds, these agencies are also without information on the nutrition education and training needs in Texas.

The results of the needs assessment is expected to benefit NET and all agencies concerned with nutrition and with nutrition education and training in Texas. These agencies are expected to use the needs assessment to define their objectives, develop long-range strategic plans, set priorities, coordinate efforts on the bases of well-determined needs, direct limited resources to the State's most pressing needs, and measure the success of their efforts relative to their effectiveness in meeting these needs.

Specifically, the needs assessment will identify nutritious foods that appeal to the different cultural groups in Texas, and ways of promoting these foods among the different target populations. This, in turn, would result in more successful efforts toward decreasing children's plate-waste and increasing their intake of nutritious foods.

In a state the size of Texas, minimal positive effects on the food and nutrition programs would result in noticeable savings. For example, if as a result of the needs assessment, the plate-waste of each public school child who receives free or reduced-price meals is decreased \$1 year-round, more than \$1,221,956 will be saved each year. Similar savings will be possible in the food and nutrition programs directed to children in non-public schools.

Other indirect benefits would materialize as a result of the needs assessment. For example, improving the nutritional status of Texas children would improve their health and result in savings in the child health care programs. The scholastic achievement of these children would improve. Based on the assessment, a sizable part of the needs assessment and the nutrition education and training efforts would be directed to adults who influence the children's learning environment. Therefore, the nutritional status of those adults would improve.

Objectives

The comprehensive needs assessment was expected to accomplish the following objectives:

- Identify the nutrition education and training needs of the various target populations and the interdependencies between these needs.
- Detect the variances and similarities of the education and training needs that are resulting from differences in socioeconomic status and ethnicity.
- Prioritized the nutrition education and training needs based on selected, well-defined criteria.
- Provide federal, state, and community agencies with data necessary to develop long-range nutrition education and training plans.
- Provide information that would enable federal, state, and community agencies to coordinate their efforts and share resources.
- Set criteria to be used by the food and nutrition programs in Texas to assess their relative success or failure in meeting the food and nutrition needs of the State.

- Inform individuals and groups in Texas on the effect of food intake on children's health, physical fitness, and scholastic achievement.
- Provide information that may guide the appropriation of monies to food and nutrition programs and to nutrition education and training programs.

Problem Statement

The project was expected to answer the following questions:

- What are the major nutrition-related health problems in Texas among children in general and among the at-risk groups? What are the nutrition education and training needs related to these problems?
- Are there problems in the dietary habits of children of diverse cultural backgrounds? What type of nutrition education and training is needed to make positive changes in these habits?
- What are the competencies and interests of educators and caregivers in the area of nutrition education? What is the nutrition education and training needed to help develop these competencies and interests?
- Do educators and caregivers encounter problems in conducting effective nutrition education activities? If so, what in-service training and/or materials can assist in alleviating these problems?
- What are the competencies and interests of food service personnel in the areas of food service management and nutrition education? What is the nutrition education and training needed to help develop these competencies and interests?
- Do food service personnel encounter problems in procuring and/or preparing nutritious and appealing food economically? If so, what in-service training and/or materials can assist in alleviating these problems?
- Do administrators of schools and child care facilities recognize the importance of nutrition education and training? Do they encounter problems in coordinating the nutrition education efforts of educators with the meal preparation and activities of the food service personnel? If so,

what is the nutrition education and training needed to help alleviate these problems?

Research Methods

NET developed a RFP packet and outlined the research methods to be followed by a successful offeror. The offeror was to conduct the needs assessment in two stages. During the first stage, the nutrition education and training needs related to K-12 school children were to be assessed. During the second stage, the nutrition education and training needs of children in child care facilities was to be determined. It was estimated that the first stage of the needs assessment would last 2 years and the second stage would last 1 year.

Stage I: K-12 School Children

NET specified the following four phases for the first two years of the project.

First Phase: Setting Goals and Criteria (Duration, 5 months). Nutrition education and training goals and goal indicators were to be set with respect to each target population. This would furnish a point of reference or preliminary criteria for the nutrition education and training in the State. Goal statements were to be collected from the literature on goals, standards, and evaluations of nutrition education and training. Indicator(s) were to be specified for each goal. The goals and their indicators were to be submitted to ICON for review and were to be modified or expanded accordingly. The offeror would classify the resulting goals and goal indicators under the goal areas set for the NET program, or under other goal areas if needed. These goals and goal indicators were to serve as criteria for nutrition education and training in Texas.

Second Phase: Collecting Available Data and Developing Data Collection Procedures and Instruments (Duration, 7 months). The successful offeror was to use the goals and goal indicators developed in the first phase of the needs assessment to identify the main areas of information to be collected. Available data on the state of nutrition education and training of the target populations and their relationship to children's scholastic achievement, health, and physical fitness were to be collected. Procedures and instruments were to be developed to collect unavailable data. The following steps were identified to collect unavailable data:

- **Sample Selection.** A representative sample of public and private schools throughout Texas was to be drawn at random from the 20 education regions in Texas. The number of schools selected from each region were to be proportional to the number of schools in that region and were to include schools participating in the different USDA food programs. Culturally representative samples were to be drawn from children enrolled in these schools and from their parents or guardians. The teachers responsible for the children's nutrition education, food service personnel, and principals were to be included in the sample.
- **Instrument Design.** Assessment instruments were to be designed such as: (a) questionnaires for children, parents or guardians, teachers, school principals, and food service personnel to measure the nutritional knowledge and attitudes of the sample; (b) instruments for menu analysis, food-intake recalls, and plate-waste records to measure the type and amount of food served, consumed, and/or discarded by children; (c) instruments to collect health information (e.g., dental, height, weight, hematocrit values, hemoglobin, and urinalysis) from the children's health records that are kept by school nurses and/or children's physicians if available, or through clinical examinations of a random sample of the children; (d) instruments to collect data on the children's physical fitness. Readability, reliability, and validity of these instruments were to be assessed. The mean percentile ranks of children on the national achievement tests conducted in the schools were to be collected. Previously developed and readily available instruments were to be used whenever possible after being modified to meet the needs assessment objectives and the sample characteristics.
- **Procedures Development.** Procedures on how and when to apply each assessment instrument and on conducting school visits were to be developed and piloted and the time spent on following each procedure estimated. The research team responsible for data collection was to be trained on these procedures. The necessary approvals to collect data were to be secured.

Third Phase: Collecting Information on the State of Nutrition Education and Training (Duration, 7 months). The successful offeror was to implement the procedures developed in the second phase of the needs assessment and to collect data using the developed instruments. Collected data was to be analyzed to

determine the actual condition of nutrition education and training with respect to the different cultural groups in the population. Following are the steps specified for data analysis and classification.

- **Data Analysis.** The main effects of the variables assessed (i.e., nutritional knowledge, attitudes, and practices; school menus; menu-recalls; plate-waste; health and physical fitness; and scholastic achievement) were to be analyzed separately and the interactions and correlations between these variables estimated. These analyses were to be conducted with respect to the samples of children, parents or guardians, teachers, food service personnel, and principals; and with respect to socioeconomic status, ethnicity, and grade level subgroups within these samples.
- **Information Classification.** The resulting information was to be cataloged and indexed based on its pertinence to the goals and goal indicators established in the first phase of the needs assessment. This was to determine the needs related to each of the nutrition education and training goals.

The offeror was asked to submit the information to ICON for review and to collect additional information, as needed, based on the advice of the Council.

Fourth Phase: Identifying and Prioritizing Needs (Duration, 5 months). The information on the state of nutrition education and training collected in the third phase of the needs assessment was to be compared with the criteria developed in the first phase. Discrepancies between the actual and ideal state of nutrition education and training were to identify the nutrition education and training needs. The needs were to be compared and ranked in priority order, based on selected criteria such as the magnitude of the need and its effect on children's health. The list of prioritized needs were to be submitted to ICON for review.

Stage II: K-12 School Children

NET assigned 1 year for a second stage of the project. During the second stage, the nutrition education and training needs of children in homes and child care facilities were to be determined in two phases. During the first phase, information on the state of nutrition education and training related to these children was to be collected. During the second phase, the nutrition education and training needs related to the children were to be identified and prioritized. There would be no need to set goals and criteria in this

stage, for the goals would have been set during the first phase of the first stage. The offerer was expected to follow procedures similar to those followed during the first stage of the project to assess the current state of nutrition education and training and to define the nutrition education and training needs.

Awarding the Project's Contract

A contract between TTU and TDHS was signed and became effective September 27, 1992, for a period of 12 months. The contract was renewable for two more years, subject to the availability of funds. Details of the project requirements that are included in the contract between TTU and TDHS and the process of selecting the contractor are stated in the Final Evaluation Report of Texas Nutrition Education and Training Program for FFY 1993.

Project Accomplishments in 1993 and 1994, and 1995

All project requirements were met during the past three years. Following are the project accomplishments in each year.

Project Accomplishments in 1993

Goals and goal indicators were developed and validated by a two-phase Delphi process. The Panel members who evaluated the goals and goal indicators were the ICON members. The goals and goal indicators were considered criteria for nutrition education and training in Texas. Assessment instruments were developed based on the goals and their indicators to measure the nutrition knowledge, attitudes and practices of school populations. The instruments and procedures were field tested and revised.

For the random sampling of Students, all Texas schools were classified into three categories according to ethnicity, family income, and scholastic achievement. Twelve subpopulations representing these three variables formed the sampling frame for the populations of elementary, junior high, and high school children.

Public (443) and non-public (41) schools throughout the 20 educational regions of Texas were randomly drawn and the administrators were invited to participate in the study. The response rate was 46%. Only 22% of the schools gave permission for on-site data collection. 8% gave permission for mail questionnaires and 16% declined to participate. This resulted in a total of 84 school on-site visits and 202 school mail questionnaires. The sample included, 1,793 3rd graders; 1,937 5th graders; 813 8th grader; and 667 11th

graders; 2,730 parents; 218 teachers; 151 food service managers; 145 food service workers; and 139 administrators. The total number of participants was 8,593.

Details of project accomplishments in 1993 were written in a report titled: *Final Annual Report of Nutrition Education and Training Needs Assessment Project for Federal Fiscal Year 1993*. It included the developed instruments and procedures in the appendices. The report was cited by the ERIC Clearinghouse on Teaching and Teacher Education in the November, 1994 issue of the *Journal Resources in Education* and assigned the identification number ED 372 050.

Project Accomplishments in 1994

Research teams were selected and trained on project procedures. They collected data on-site at the 84 randomly selected schools. Data included completed questionnaires, physical fitness and health assessments, scholastic achievement scores, plate waste and food service practice observation. For the mail questionnaire, packets of instruments and directions were mailed to school administrators who disseminated the materials, collected completed instruments, and returned them to the NET research office.

Data were collected, coded, entered into the mainframe computer, and standardized residuals were computed. The standard of 70% was established for the measurements of acceptable performance on the various measurements. ANOVA and multiple comparisons were used to test the data for significant differences according to ethnicity. The same analysis was used to identify significant differences according to family income.

Results of Assessing the Nutrition Education and Training Needs of School Populations

Results indicated that nutrition knowledge was, in general, below 70% acceptable level for all populations. Nutrition attitudes were positive. Food choices and nutrition practices need to be improved in order to meet the Dietary Guidelines for Americans. In addition, food service managers need support in planning and implementing menus which are more in compliance with the guidelines. The populations are eating too much fat, saturated fat, cholesterol, sugar and sodium.

Significant differences were found for ethnicity according to total nutrition knowledge assessment. White children had higher nutrition knowledge scores than African-American and Hispanic children.

Significant differences were found on the total nutrition attitude assessment for 8th and 11th grades. In the 8th grade, Whites had more positive attitudes toward nutrition than

Hispanics, and African-Americans held more positive attitudes than Hispanics. For the 11th grade, Hispanics had more positive attitudes toward nutrition than Whites.

Significant differences were found on food choices in grades 3, 5 and 8 with Whites selecting more nutritious food than African-Americans, and Hispanics. Hispanics selected more nutritious food than African-Americans.

Significant differences were found on the nutrition practices in grade 5 and 8 with Whites following the Dietary Guidelines more than Hispanics and African-Americans.

Thus, educational strategies need to be developed to meet the less desirable nutrition knowledge, attitudes, food choices, and nutrition practices of school age children. Although Whites frequently performed significantly better than other ethnic groups, their mean scores were below the 70% acceptability level.

Significant differences were found across family income status. Students with paid meals (according to eligibility for paid, reduced, or free meals) had higher knowledge achievement than those with free meals, and reduced price meals. No significant differences were found across family income on attitude assessment for all grades.

Similar results were evident when the effect of children's scholastic achievement on their nutrition knowledge attitudes and practices were investigated. Students with high scholastic achievement scores scored better in nutrition knowledge and practice.

On the assessment of physical fitness, the major finding was that 25% of the children of all ages were obese. This is a serious concern because these children will experience major health problems in the future unless dietary habits are modified and regular exercise is incorporated within the daily routine. Only 9% of the children were anemic.

Participation in the school meal programs was assessed. If students ate breakfast at all, they ate this meal at home. The majority of students ate school lunch five days per week, with the exception of the 11th graders. The main reason given for not participating in the school meal program was not liking the food. In general, the parents were satisfied with the meals although the main reason for dissatisfaction was that the food was not appealing. Another complaint was that too much sugar and starch were served.

The nutrition knowledge, food choices, and nutrition practices (with and without the presence of children) of parents and teachers were below the acceptability level of 70%. To address these findings, recommendations were made to provide nutrition intervention to increase the awareness and importance of the Dietary Guidelines for Americans.

Food service personnel lack nutrition knowledge, especially in the topics of sanitation and safety and healthy food choices. Food service managers need to upgrade their

management knowledge, especially in menu planning, marketing, sanitation and safety, food acceptance, service, and financial management. Training and resources are necessary to promote compliance of planned and served menus with the Dietary Guidelines for Americans and the National Research Council.

Administrators' knowledge of the relationship between nutrition and scholastic achievement was below 70%. Almost all of the administrators stated that nutrition is taught in their school with almost 90% of the schools having nutrition integrated into health, science, and physical education.

Differences were apparent on teaching nutrition and the process of cooperation and support. Over three-fourths of teachers, food service, and administrators indicated that there is a shortage in nutrition education in the cafeteria. Collaboration and support on the nutrition education among teachers, administrators, and food service is needed. It may prove beneficial to expand the efforts to include a registered dietitian, parents, and children on a task force. Food service managers and administrators were much more supportive of nutrition education activities than teachers. Recognition of specific ways to promote nutrition education in the cafeteria were quite similar across the three groups.

Teachers, food service personnel and administrators identified resources and problems related to school food service and nutrition education and training. Nutrition and nutrition education topics of interest to the target populations were assessed, as well as preferred methods of receiving information on these topics.

Details of the project's accomplishments in FFY 1994 were included in two separate yearly report titled: *Final Annual Report of Nutrition Education and Training Needs Assessment Project for Federal Fiscal Year 1994*. The report was submitted for publication to ERIC Clearinghouse on Teaching and Teacher Education.

Project Accomplishments in 1995

The contract with TTU was renewed for another 12-month period to collect data on the actual state of nutrition education among preschool populations, compare it with the desired state as specified in the established criteria, and to identify the nutrition education and training needs. The contract was extended for 3 more months.

Instruments were developed based on the goals and goal indicators that were developed in year 1 of the project. Field tests were conducted and revisions were made accordingly. Procedures for measuring physical fitness and health, assessing plate waste, and observing food service practices were developed, reviewed by professional consultants, and field tested. Menu analysis for compliance of meals was developed.

Child care facilities in the eleven regions under the jurisdiction of TDHS served as the population for the study. A random sample representative of care sites according to three facility types (registered family home, group day care home, and day care center) was made. In drawing the sample, no information was available on the ethnicity, socioeconomic status, and learning level of the children. This data was collected using the needs assessment instruments.

Five-hundred ninety-eight child care facilities were systematically selected from a population of 26,250 facilities. This group of 598 facilities was selected from 11 regions in the state and proportionally from the three types of facilities.

Letters of invitation to participate in the assessment were sent to randomly selected child care settings as follows: 358 (60%) registered family home, 41 (7%) group day care home, and 199 (33%) day care centers, totaling 598. After two follow-up letters and telephone calls, approximately 100 centers responded to invitations to participate. The response rate was: 13.7%, registered family home; 14.6%, group day care home; and 23.6%, day care centers. In addition, mail questionnaires were sent to randomly selected child care facilities to solicit responses from teachers, providers, food service managers, directors, and sponsors. The sample included 135 children, age 3; 143 children, age 4; 78 children, age 5; 610 parents, 46 teachers, 72 providers, 35 food service personnel, 28 directors, and 48 sponsors. The total number of participants was 1332.

A research team was selected and trained to collect data. The team collected data on-site at 49 registered family homes, 6 group day care homes, and 47 day care centers. Data included questionnaires, physical fitness and health assessments, plate waste, and food service practice observation. For the mail questionnaire, packets of instruments and directions were mailed to randomly selected child care sites and all sponsors.

Descriptive statistics, analysis of variance, Scheffe procedures, chi-square tests, and standardized tests were computed. The standard of 70% was established for the measurement of acceptable performance on nutrition knowledge, nutrition attitudes, food choice, and food consumption.

Results of Assessing the Nutrition Education and Training Needs of Preschool Populations

Of the populations studied, those who did not achieve the 70% acceptable nutrition knowledge level were younger children and parents. Older children achieved 74% and directors performed at 70% on the knowledge instrument. Nutrition attitudes were positive. Food choices, based on the Dietary Guidelines for Americans (DGA's), were below the 70% level for children, parents, and teachers (child not present). Observed

food intake of children revealed a refusal rate of more than 10% for many CACFP food components.

Although planned menus were adequate for children's nutritional needs, the menus implemented were not in compliance with CACFP guidelines. Food safety and sanitation were concerns. Food temperatures (refrigerator, freezer) were not in compliance; food service cleanliness of work areas was not maintained and routine hand washing by child care staff and children was not enforced. No food component qualified 100% of the time for breakfast and lunch menus due to insufficient serving size.

The knowledge instrument test items for children were portrayed in colored drawings. Each question was read by a researcher in a private area of the day care site. The nutrition knowledge of younger preschool children was below the 70% level of acceptability. Older preschool children demonstrated an overall mean of 74% for the eight-item test.

Further analysis was conducted to determine the effects of ethnicity, family income, and at-risk factors. Significant differences were found for ethnicity according to nutrition knowledge of five-year old children. White children had higher nutrition knowledge than African-American and Hispanic children. Although not significantly different, attitudes of White children were higher than attitudes of African-American and Hispanic children.

The effects of family income, as indicated by free, reduced, or full price meals, were tested on knowledge, attitudes, and behaviors of pre-school children. No significant differences were found from the effects of family income on children's nutrition knowledge scores. Student whose families qualified for reduced-price meals had significantly higher attitude values (1.79/2.0) than those children who were eligible for free meals (1.70/2.0). Food choices of preschool children were affected by family income. Children who were eligible for reduced-priced lunch made significantly more desirable fiber choices than those who qualified for free lunch.

Obesity was identified by a ratio of observed weight to expected weight for observed height plotted on the Harvard growth charts. A range of 80-120 was considered normal (2 S.D. from 50%) and a result greater than 120 was judged "obese". The occurrence of obesity was identified as 7-11% of the preschool children according to age. Of 358 children examined, 95% were found to have "average" to "excellent" dental condition. No significant differences were found according to age, gender, or ethnicity. Some concern was expressed about the need for improved immunization: Since 7-10% of these pre-school children were not vaccinated for diphtheria, pertussis, tetanus, and polio; and 10% were susceptible to measles, mumps, or rubella.

Parents' nutrition knowledge and food choices (assumption of child present, child not present) were below the acceptability level of 70%. Teachers and providers selected

more desirable food choices when the children were assumed present; both teachers and providers were below the acceptability level of 70% in their food choices when children were assumed absent. Only the teachers (day care centers) demonstrated competency of nutrition knowledge at a level of 70%.

Food service personnel demonstrated nutrition knowledge which was above the 70% acceptability level. Their attitudes toward nutrition were positive (4.35/5.0). However, the management knowledge of this population was below the 70% level of acceptability. Lower comprehension was evident on the management subscale: food service and menu planning. Submitted menus met and exceeded the nutrition needs of children but the actual foods served did not meet the CACFP guidelines. Practices, such as food safety and sanitation, were not professional.

The administrators, including directors and sponsors, demonstrated an overall mean which met the level of 70% acceptability. Their attitudes toward nutrition were positive. Almost 100% of the sponsors and 86% of the directors indicated that nutrition education is integrated with other activities. Directors identified the child care center library and meal service as the resources used most often in teaching nutrition; sponsors indicated the USDA child nutrition program and meal service for the resources used most.

Differences were found between educators, food service personnel, and administrators in their responses to problems which would interfere with nutrition education. Problems cited were insufficient funds to support nutrition education, lack of interest among parents, directors, and care givers, and lack of time to plan, coordinate, and implement nutrition education.

Over 90% of the directors reported that nutrition education was taught in their child care programs. This finding is supportive of teachers' response (90%) and that of providers (85%) in giving instruction on nutrition. Directors noted that the main nutrition concepts to be taught should be healthy food choices, food safety and sanitation, and nutritional needs. Educators reinforced the directors' selected nutrition subscales of healthy food choices and food safety but noted the basic 4 food groups instead of nutritional needs.

Effective factors in teaching nutrition were identified. Differences were found between administrators, food service personnel, and providers. Inservice training was identified as an effective factor by the highest percentage of administrators (directors and sponsors). However, over 75% of the food service personnel specified aid from the director and aid from the cook as the most effective factors. Then 60% or more of the providers reported that aid from the director and nutrition curriculum would be the most effective factors. Over 75% of the food service personnel indicated that they were involved in nutrition education.

Day care center directors, food service personnel and teachers as well as Family day home sponsors and providers identified nutrition education topics of interest and preferred methods of receiving information on these topics.

Recommendations

- NET incorporated some of the results of the project in its current plans and activities and it is recommended that NET continues to do so in the future. It is also recommended that NET coordinate efforts with other agencies interested in food and nutrition and nutrition education and training based on the results of the needs assessment.
- NET disseminated the results of the first stage of the needs assessment to ICON members and to other state and community agencies and groups in Texas that are interested in food and nutrition and nutrition education and training and it is recommended that NET continues to do so with respect of the second stage of the project.
- Texas NET shared the yearly accomplishments of the project and experiences gained with the rest of the states to avoid possible duplication of efforts and enhance efforts toward better methodologies and outcomes, and should continue to do so with respect of the second stage of the project.
- NET should review the results of the comprehensive needs assessment when developing future evaluation and needs assessment plans to answer questions that may have been raised or left unanswered by the comprehensive needs assessment.

IV. GENERAL EVALUATION OF THE NET PROGRAM

Introduction

Background

Formal evaluation of the Texas NET program was initiated in October 1984 to meet federal requirements for program evaluation and to collect information that helps make the program as effective as possible. Since then, a number of studies have been conducted each year to develop information the General Accounting Office cited in 1982 as being necessary to:

- Effectively administer the program
- Guide program revisions and planning
- Ensure that federal funds are spent effectively
- Supply the USDA with data to submit to Congress to aid decisions about how to apportion scarce resources

During FFY 1995 NET directed the comprehensive statewide needs assessment project mentioned in the third section of this report. Two evaluation studies were conducted to answer the following questions about performance of the Texas NET Program:

1. To what extent did the NET Program achieve its participation goals during FFY 1995?
2. How effective was the Texas NET Program in achieving its goals, relative to its resources?

The first question was answered in the second section of this report. The second question is answered in this section.

Purpose

The purpose of this study was to assess overall program performance during FFY 1995. The results of the evaluations conducted during the year were combined to produce an index of program effectiveness. Key questions answered in this section are:

- Relative to its resources, was the overall effect of the Texas NET program in 1995 positive, negative, or nonsignificant?
- What were the strengths and weaknesses of overall program performance during FFY 1995?

Program Resources

Budget and Staffing

Two main resources of the Texas NET program are its budget, which provides the material resource, and its staff, which provides the human resource. Table 11 summarizes and compares the program's resources for the past 10 years.

Table 11

Texas NET Program Resources for the Past Ten Years

Resources	FFY86	FFY87	FFY88	FFY89	FFY90	FFY91	FFY92	FFY93	FFY94	FFY 95
BUDGET	294,060	295,860	315,290	315,000	318,642	513,518	703,396	718,190	744,215	747,191
STAFFING										
Coordinator	.300	.125	.750	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Evaluator	1.000	1.000	.850	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Program Specialists	1.500	2.000	2.000	2.000	1.500	2.000	2.000	2.000	2.000	2.000
Librarian	-----	-----	-----	-----	0.500	1.000	1.000	1.000	1.000	1.000
Assistant	-----	-----	-----	-----	-----	2.000	3.000	2.000	2.000	2.000
Information Specialist	-----	-----	-----	-----	-----	-----	-----	1.000	1.000	1.000
Clerical & Automation Support	2.670	3.000	3.000	2.500	3.000	1.000	1.000	1.000	1.000	1.000
Total Staff	5.470	6.125	6.600	6.500	7.000	8.000	9.000	9.000	9.000	9.000

Table 11 shows that NET program funding in 1995 remained almost the same as 1994. Funding in 1994 and 1993 increased 3.6% and 2.1% respectively. The USDA funding formula for the NET program is based on the number of school children in the State. In Texas, the number of children attending public schools grew from 3,460,378 in 1992/93 to 3,535,742 in 1993/94 and 3,677,171 in 1994/95. Thus, the increase in the number of school children in the 1994/95 school year was 88 % more than their increase in 1993/1994. Staffing remained the same in 1995 but contract funding increased.

It must be noted here that \$165,000 was invested in research. This money came from the 1994 budget. TTU was awarded this money to fund the third phase of the comprehensive nutrition education and training needs assessment. The effect of this research endeavor on the NET program is expected to materialize in future developments and improvements. The results would also benefit federal, state and community agencies concerned with nutrition and education.

Contracts

A total of 29 contracts were awarded or renewed in 1995. The amount of each and activities conducted using all or part of the amount are as follows.

Texas School for the Deaf Contract

The Texas School for the Deaf, located in Austin, was awarded \$15,000 from the 1995 budget to package and mail materials distributed to NET program participants, and especially the workshop curriculum packages mailed to the different training sites. The amount of contract money was 3.75 times the amount awarded in 1994.

Workshop Trainers Contracts

NET contracted with 24 registered and/or licensed dietitians from different regions throughout Texas to deliver NET workshops and participate in workshop development and library material evaluation. The trainers also delivered presentations and were encouraged to hold exhibits in their regions. They were brought once to Austin--the NET program office location--to participate in the *Train the Trainer* workshop. The workshop was designed to familiarize them with the NET program and its services, the workshops, procedures to schedule and conduct a workshop, and the facilities and resources available to them, especially the NET library. The trainers were also instructed on the principles

of conducting successful workshops. The 24 contracts awarded to the trainers totaled \$181,000.00. This amount was funded from the FFY 1995 budget and was an 81% increase over 1994.

Independent Translator Contract

NET awarded a \$20,000 ongoing contract to an independent translator in Austin to translate educational/promotional materials into Spanish. The contract was funded from the 1995 budget and was twice the amount of last year's contract. The contractor translated the training package of the workshop *Off to a Good Start for Family Day Homes* and the *Feeding Children Well* video that is included in the training package.

Texas Tech University Contract

As mentioned in the third section of this report, NET developed a RFP to conduct a three-year comprehensive nutrition education and training needs assessment statewide. An interagency contract was awarded to TTU at the end of 1992. In 1993 a research team from TTU worked with the NET Program Evaluator to implement the RFP requirements and provisions of the first year. The amount of the original contract was \$99,998 which was funded out of the 1992 NET budget. The contract was renewed for a second year for \$158,000 to complete the assessment of the needs of Texas school populations, including children, parents, educators, food service personnel and administrators.

In September 1994 the contract was renewed for a third year to assess the needs of preschool populations. TTU was awarded \$165,000 out of the 1994 budget to conduct the needs assessment activities in 1995.

Padres Hispanos En Accion Contracts

Two Spanish speaking trainers were awarded contracts to train parents of Hispanic children enrolled in Head Starts throughout Texas. The amount of contracts were \$17,625 divided equally between the two trainers. The contracts monies come from the USDA Food and Consumer Services, the sponsor of the Padres Hispanos En Accion project. Most of the project's activities will be conducted in FFY 1996.

Program Activities

Table 12 summarizes the main activities of the program in the past 10 years.

Table 12

Texas NET Program Activities for the Past Ten Years

Activities	FFY86	FFY87	FFY88	FFY89	FFY90	FFY91	FFY92	FFY93	FFY94	FFY95
WORKSHOPS										
Developed	2	3	1	2	2		2	2	2	7
Conducted	145	185	183	112	103	164	225	193	192	251
LIBRARY										
Acquisitions		180	420	68	304	606	238	321	479	716
Items Circulated/Month	100	100	150	189	231	274	319	427	482	533
Catalogs Distributed	12,000	680	200	632	490	2,489	383	655	1,934	2,359
MATERIALS										
Acquisitions/Development	5	15		5	5	10	10	17	15	15
Distributions	10,800	12,800	17,200	11,800	11,776	24,645	32,021	800,426	10,892	52,782
SPECIAL PROJECTS										
Mini-contracts/Development Contracts	3	2	0	1	2	4	11	8	6	2
Evaluation/Needs Assessment Studies	7	6	5	5	5	6	5	3	3	4
Persons Reached	9,760	10,900	10,300	23,343	25,760	622,576	955,863	847,195	861,882	1,777,046

Table 12 shows expansion in program activities in most areas. Mini-contracts were not administered in 1995. A RFP was developed however and 9 mini-contracts were awarded to PTA's throughout Texas to promote the new Dietary Guidelines for Americans and good nutrition to parents. These mini-contracts will be implemented in 1996.

The number of workshops that were developed was more than triple their number in the past seven years. The number of delivered workshops increased 30.7% over 1994 and 1993 but the number of workshop participants decreased from their number in 1994, indicating a decrease in the number of participants in individual workshops.

Acquisition and circulation of library materials increased steadily since 1986, perhaps due to the relative stability and growth of resources allocated to the library. In 1995 library acquisitions increased 49.5% over 1994. Monthly circulation of library items was 10.6% more than in 1994. The number of catalogs distributed in 1995 increased considerably. Catalog distribution increased in 1994 as a result of developing the audiovisual catalog in 1993 and distributing it to organizations interested in nutrition education. A similar increase occurred in 1995 as a result of revising the print catalog in 1994.

Material acquisition fluctuated slightly during the past ten years. 1993 witnessed a considerable surge in material distribution due to outreach letters distributed to school superintendents, food service personnel, PTA presidents, day care centers, and day home sponsors, and distribution of 751,500 lunch bags promoting breakfast to school children. The decrease in 1994 material distribution compared to the 7 previous years was due to a change in the workshop policy. NET stopped distributing workshop materials and handouts to the facilities of workshop participants. The same policy was in effect in 1995 but material distribution increased due to an increase in the variety of distributed materials.

In 1995 participation in the NET program doubled from participation in 1994. More food service personnel participated in the different program interventions and indicated that they reach larger number of children than are usually reached by educators.

Considering the program's activities relative to its resources, and the program's potential for improved planning of activities based on the results of evaluation and needs assessment one must conclude that the program is administered efficiently and that it is realizing its goals.

Meta-Analysis of Program Outcomes

Results of evaluations of specific NET activities were integrated to develop an index and analysis of overall effectiveness of program performance in 1995. The vote-counting method for program meta-analysis was applied to integrate results of evaluations conducted during FFY 1995. These evaluations included varied data collection and analysis procedures that were described in detail in the previous sections of this report. Following is a summary of these procedures:

- To estimate the effectiveness of the program in achieving its participation goals for FFY 1995, goals were set for each of the program's major activities and for each of its target populations. Participation goals were estimated based on current priorities, current staffing, and prior participation figures.
- To estimate program expansion and efficiency in 1995 participation in program intervention was compared with participation in similar interventions in 1994.
- Ratings of participants to program interventions were used as an estimate of the quality of these interventions.
- To estimate the effectiveness of the contracts/grants awarded for research and development, effectiveness was measured by the extent of fulfilling the terms stipulated in the contract.

Results and Discussion

To apply the vote-counting method for integrating results across these separate evaluations, counts were made of all findings that were classified as positive, negative, or nonsignificant. Tallies were compared and the modal category accepted as giving the best estimate of NET Program effectiveness. Table 13 summarizes results of the meta-analysis.

Table 13**Results of Meta-Analysis of Program Outcomes**

Activity	Data Analysis	Indicator	Result
Workshops	Percentage increase over 1994	Number of workshops	Positive
	Percentage increase over 1994	Number of workshop participants	Negative
	Goal-percentage by target population	Number of workshop participants from public schools	Positive
	Goal-percentage by target population	Number of workshop participants from other populations	Positive
Lending Library	Percentage increase over 1994	Total circulation	Positive
	Goal-percentage by target population	Number of public school populations borrowing from the library	Positive
	Goal-percentage by target population	Number of child care populations borrowing from the library	Positive
	Rating scale on borrowers feedback forms	Substance of borrowed materials	Positive
	Rating scale on borrowers feedback form	Usefulness of borrowed materials	Positive
	Rating scale on borrowers feedback form	Quality of borrowed materials	Positive
Development and Distribution of Instructional Materials	Percentage increase over 1994	Number of materials developed	Same
	Percentage increase over 1994	Number of materials distributed	Positive
Presentations	Percentage increase over 1994	Number of presentations	Negative
Exhibits	Goal-percentage	Number of exhibits	Positive
	Percentage increase over 1994	Number of exhibits	Same
Publications	Percentage increase over 1994	Number of publications	Negative
Coordination With Related Programs	Percentage increase over 1994	Number of organizations	Positive
Contracts	Comparison between contract Terms and accomplishments	Fulfillment of contracts Terms within the time limit	Positive

Table 13 indicates that when data were integrated across the evaluations conducted during FFY 1995, it revealed an overall positive impact of the NET program in Texas. Seventeen evaluations were conducted to estimate the effectiveness of the main aspects of the program. Twelve of these evaluations showed positive outcomes, and three outcomes were negative and two remained the same. Negative results in general indicate a need

to improve the ability of the program to monitor activities and take timely measures to correct services and procedures.

The number of participants in some of the workshops conducted in 1995 was less than the number required to conduct these workshops according to workshop procedures and there was a general decline in the number of workshop participants in spite of the substantial increase in the number of workshops conducted. This indicates a need for a closer look at the procedures followed in scheduling workshops, and on the appeal of some of the workshops to target populations. Failure of the workshops to attract public school educators points to a need to coordinate teacher training with TEA and to implement the results of the comprehensive needs assessment regarding teacher training needs.

All the NET library participation goals were met in 1995. The lending library attracted more patrons and circulated more nutrition and food service management materials during 1995 than in any previous year.

The substantial decrease in the number of presentations and number of participants in this type of intervention require consideration of NET policy in this regard. Most of the presentations delivered in 1994, unlike those delivered in 1995, were a result of coordination with large scale training delivered by state organizations.

NET developed and distributed more instructional/promotional materials in 1995 than in 1994 and previous years as it stopped the distribution of workshop materials to the facilities of workshop participants. The NET staff and contractors were active in giving conference presentations nationally and statewide and in publicizing NET services and evaluations.

In 1995 the NET program also remained actively involved in coordination efforts with other public sector programs and agencies engaged in child nutrition activities. This coordination is an extension of a trend that started in 1990 and is expected to continue due to the long range strategic planning between NET and other agencies. Effects of such efforts are expected to materialize in the form of substantial increases in NET outreach and participation in subsequent years.

Recommendations

- Few NET activities are directed toward promoting use of the cafeteria as a learning laboratory. NET may develop presentations and materials for use in the cafeterias and for reinforcing, in the classroom, knowledge and attitudes gained from these activities.
- NET should continue the function of a clearinghouse and a consultant to organizations, facilities, groups, and individuals on nutrition education and training in general, and on best practices in the field.
- NET may recruit the contract trainers in consulting workshop participants as they apply the knowledge and skills gained from the workshops in their work environments. Similar services could also be provided to schools, child care centers, day homes, and parents in general. The trainers could provide menu analysis and dietetic consultations to soup kitchens, half-way homes, and to other organizations serving at-risk groups such as the indigent and the homeless.
- Since NET is expanding its interventions and strategies, there is an emerging need for measuring the relative cost-effectiveness of various interventions and alternative strategies. Emphasis should be placed on more successful and cost-effective interventions and strategies.
- There is a need to direct more efforts toward measuring the quality of NET's services and follow-up with necessary improvements.

APPENDIX

EVALUATION INSTRUMENTS USED IN NET PROGRAM OUTREACH

NET PROGRAM WORKSHOP EVALUATION

Workshop: _____ Instructor: _____ Date: _____

Directions: Please circle the number that best describes your evaluation. Use the following number values:

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

The Workshop:

- | | | | | | |
|---|---|---|---|---|---|
| 1. Main points/objectives were clear | 1 | 2 | 3 | 4 | 5 |
| 2. Was well-organized | 1 | 2 | 3 | 4 | 5 |
| 3. Was well-paced/kept my interest | 1 | 2 | 3 | 4 | 5 |
| 4. Contained the right amount of information | 1 | 2 | 3 | 4 | 5 |
| 5. Gave me enough opportunity to practice the new skills | 1 | 2 | 3 | 4 | 5 |
| 6. Gave enough feedback on how well I used the new skills | 1 | 2 | 3 | 4 | 5 |

The Materials:

- | | | | | | |
|---|---|---|---|---|---|
| 1. Were well-organized/easy to use | 1 | 2 | 3 | 4 | 5 |
| 2. Directly related to the subject being taught | 1 | 2 | 3 | 4 | 5 |
| 3. Were sequenced logically to help me understand | 1 | 2 | 3 | 4 | 5 |
| 4. Represented real-life, believable situations | 1 | 2 | 3 | 4 | 5 |
| 5. Used the right level of vocabulary | 1 | 2 | 3 | 4 | 5 |
| 6. Were visually appealing | 1 | 2 | 3 | 4 | 5 |

The Instructor:

- | | | | | | |
|--|---|---|---|---|---|
| 1. Was knowledgeable about the subject | 1 | 2 | 3 | 4 | 5 |
| 2. Was well-prepared for class | 1 | 2 | 3 | 4 | 5 |
| 3. Encouraged class participation and discussions. | 1 | 2 | 3 | 4 | 5 |
| 4. Answered questions effectively/non-judgmentally | 1 | 2 | 3 | 4 | 5 |
| 5. Illustrated the course with useful examples | 1 | 2 | 3 | 4 | 5 |
| 6. Used class equipment competently. | 1 | 2 | 3 | 4 | 5 |

What part(s) of the session will be **most** helpful to you in doing your job?

What part(s) of the session will be **least** helpful to you in doing your job?

What suggestions do you have for improving this session?

Thank You
91 88

Revised January 1992

NET Evaluation of Workshop Instructor

GENERAL INFORMATION

Name of Workshop: _____ Date: _____

Name of Instructor: _____

Name of Evaluator: _____

Workshop Location: _____

City

Please circle the number which corresponds to your rating of the instructor's performance during the workshop.

Excellent (5)	Good (4)	Average (3)	Fair (2)	Poor (1)
------------------	-------------	----------------	-------------	-------------

OBJECTIVES

- | | | | | | |
|---|---|---|---|---|---|
| 1. Clearly stated the objectives at the beginning of the session | 5 | 4 | 3 | 2 | 1 |
| 2. Demonstrated the importance and significance of the objectives | 5 | 4 | 3 | 2 | 1 |

CONTENT

- | | | | | | |
|--|---|---|---|---|---|
| 3. Presented a brief overview of the teaching points showing how they relate to the objectives | 5 | 4 | 3 | 2 | 1 |
| 4. Explicitly stated the relationships among the teaching points | 5 | 4 | 3 | 2 | 1 |
| 5. Periodically summarized the main ideas and concepts | 5 | 4 | 3 | 2 | 1 |
| 6. Presented content that covered the stated objectives | 5 | 4 | 3 | 2 | 1 |

METHODS

- | | | | | | |
|--|---|---|---|---|---|
| 7. Explained the ideas and concepts clearly and to the point | 5 | 4 | 3 | 2 | 1 |
| 8. Invited participants to share their ideas and knowledge | 5 | 4 | 3 | 2 | 1 |
| 9. Encouraged participants to ask questions and gave them meaningful answers | 5 | 4 | 3 | 2 | 1 |
| 10. Provided cues or rephrased the questions to help participants answer their own questions whenever possible | 5 | 4 | 3 | 2 | 1 |

	Excellent (5)	Good (4)	Average (3)	Fair (2)	Poor (1)
11. Stated at least one problem to be solved or discussed during the workshop	5	4	3	2	1
12. Related materials to real life situations and to the participants' backgrounds	5	4	3	2	1
13. Changed approaches to meet new situations	5	4	3	2	1

AUDIOVISUALS

14. Presented examples, illustrations or graphics to clarify the content	5	4	3	2	1
15. used the board efficiently and legibly	5	4	3	2	1

EVALUATION

16. Asked questions periodically to determine whether too much or too little information was being presented	5	4	3	2	1
17. Varied content and methods according to the participants' levels	5	4	3	2	1
18. Gave adequate instructions on how to complete the evaluation instruments	5	4	3	2	1

WORKSHOP MANAGEMENT

19. Followed the curriculum as planned and did not digress from the main topic	5	4	3	2	1
20. Was well organized and appeared to be in control	5	4	3	2	1
21. Managed the time so as to cover all planned activities	5	4	3	2	1
22. Solved or otherwise dealt with problems raised by participants	5	4	3	2	1

OVERALL

23. Was friendly towards workshop participants	5	4	3	2	1
24. Seemed enthusiastic about the subject matter	5	4	3	2	1
25. Noted and responded to signs of puzzlement boredom, curiosity, etc.	5	4	3	2	1

Total

Was the anti-discrimination poster "And Justice for All" prominently displayed?

93

100

Yes No

GENERAL COMMENTS

If you were giving this workshop:

- a. What would you add? _____

- b. What would you leave out? _____

- c. What would you do differently? _____

If you have other suggestions or observations, please specify: _____

REPORTING

Returns the workshop report files within <u>two weeks</u> of workshop delivery	All the Time	Most of the Time	Sometimes	Rarely
Returns the training reports within <u>two weeks</u> of training	All the Time	Most of the Time	Sometimes	Rarely
Returns the presentation reports within <u>two weeks</u> of presentation	All the Time	Most of the Time	Sometimes	Rarely
Returns the library evaluation forms within <u>30 days</u> of receiving the materials	All the Time	Most of the Time	Sometimes	Rarely

Comments _____

WORKSHOP REGISTRATION FORM

General Information (please print)

Name of Workshop: _____ Date: _____

Your Name: _____

Sex: Male _____ Female _____

Ethnic Origin: White _____ Black _____ Hispanic _____ Asian/Pacific Islander _____
American Indian/Alaskan Native _____

Your Social Security Number: _____

Name of Your Work
Facility: _____

Work Address: _____
Street or P.O. Box

City State Zip Code

Work Telephone Number: _____
Area Code

Please circle the number next to the answer you choose.

1. For what type of facility do you work?

- | | | | |
|---|----------------------|---|------------------------------|
| 1 | Public school | 4 | Family day home |
| 2 | Private grade school | 5 | RCCI |
| 3 | Day care center | 6 | Other. Please specify: _____ |

2. What is your function?

- 1 Educator (a teacher, administrator, health educator, teacher aide, nurse, and other personnel who work in instructional capacity)
- 2 Food service personnel (a person who is employed on a full or part-time basis in the supervision, preparation, planning, or service of meals for children)
- 3 Parent or guardian (natural or legal parent, foster parent and/or other adult with full responsibility for a child's care)
- 4 Other. Please specify: _____

3. Are you a Summer Food Service Program Sponsor?

- 1 Yes
- 2 No

4. Approximately how many children do you teach, care for, supervise, or prepare meals for when performing the above mentioned function? _____ children

5. In what food program(s) does your facility participate?

- 1 Child Care Food Program
- 2 National School Lunch Program
- 3 School Breakfast Program
- 4 Special Milk Program
- 5 Summer Food Service Program
- 6 None.

THANK YOU!
95

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Revised - January 1993

**NET PROGRAM
PRESENTATION EVALUATION**

Name of Your Work Facility: _____

Social Security Number: _____

Please circle the number next to the answer you choose.

1. What is your function?

- 1 Educator (a teacher, administrator, health educator, teacher aide, nurse, and other personnel who work in an instructional capacity)
- 2 Food service personnel (a person who is employed on a full or part-time basis in the supervision, preparation, planning, or service of meals for children)
- 3 Parent or guardian (natural or legal parent, foster parent and/or other adult with full responsibility for a child's care)
- 4 Other. Please specify: _____

2. For what type of facility do you work?

- | | |
|------------------------|--------------------------------|
| 1 Public school | 4 Family day home |
| 2 Private grade school | 5 RCCI |
| 3 Day care center | 6 Other. Please specify: _____ |

3. Are you a Summer Food Service Program Sponsor?

- 1 Yes
- 2 No

4. Approximately how many children do you care for? _____

5. Was the main purpose of the presentation stated clearly?

- 1 Yes
- 2 To Some Extent
- 3 No

6. Was the information presented relevant to your needs?

- 1 Yes
- 2 To Some Extent
- 3 No

7. What suggestions do you have for improving this presentation?

If you would like more information on the NET program please print your mailing address here:

CLASSROOM PRESENTATION REGISTRATION FORM

1. Title of Presentation: _____
2. Length of Presentation: _____ hours _____ minutes 3. Date: _____
4. Name of Presenter: _____
5. Title of Presenter: _____
6. Name of Facility: _____
7. Address of Facility: _____
Street or P.O. Box _____
City _____ State _____ Zip Code _____
8. Telephone Number of Facility: () _____
Area Code _____
9. Contact Person: _____
10. Type of facility. (Please circle the number next to the answer you choose.)

1 Public school	4 Family Day Home
2 Private school	5 RCCI
3 Day care center	6 Other. Please specify: _____
11. In what food program(s) does the facility participate? (Please circle the number next to the answer you choose.)

1 Child Care Food Program
2 National School Lunch program
3 School Breakfast Program
4 Special Milk Program
5 Summer Food Service Program
6 None
12. Total Number of Students: _____
13. Age Range of Students: _____ 14. Grade Level: _____
15. Total Number of Students by Ethnic Origin (if available):
White _____ Black _____ Hispanic _____
Asian/Pacific Islander _____ American Indian/Alaskan Native _____

Developed January 92

LIBRARY EVALUATION FORM

Please fill out this form and return it with the material you borrowed. Your response will help us improve our services. This form is also used for statistical purposes.

General Information (please print)

Title of Borrowed Item: _____ Date: _____

Your Name: _____

Please circle the number next to the answer you choose.

1. For what type of facility do you work?

- | | | | |
|---|-----------------|---|------------------------------|
| 1 | Public school | 4 | Family day home |
| 2 | Private school | 5 | RCCI |
| 3 | Day care center | 6 | Other. Please specify: _____ |

2. What is your function?

- 1 Educator (a teacher, administrator, health educator, teacher aide, nurse, and other personnel who work in instructional capacity)
- 2 Food service personnel (a person who is employed on a full or part-time basis in the supervision, preparation, planning, or service of meals for children)
- 3 Parent (natural or legal parent, foster parent and/or other adult with responsibility for a child's care)
- 4 Other. Please specify: _____

3. Who and approximately how many saw the item borrowed?

	<u>WHO</u>	<u>HOW MANY</u>
1	Self	_____
2	Children in your facility	_____
3	Educators	_____
4	Food service personnel	_____
5	Parents	_____
6	Others. Please specify:	_____

4. How did you learn about the NET Library?

- 1 By attending a NET workshop
- 2 From a friend or co-worker
- 3 At a professional meeting or conference
- 4 Other. Please specify: _____

5. What is your overall rating of the borrowed item?

	Poor	Fair	Good	Excellent
The item's content	1	2	3	4
The way the content was presented	1	2	3	4
How useful was the item to those who saw or read it	1	2	3	4

THANK YOU! 105

**NET Library
Material Evaluation Form**

1. **Title:** _____
2. **Length:** (if video) _____ minutes
3. **Language:** ____English ____Spanish
4. **Target Group Choices** (may select more than one):
- | | |
|--|---|
| <input type="checkbox"/> Prenatal | <input type="checkbox"/> College Students |
| <input type="checkbox"/> Preschool | <input type="checkbox"/> Parents |
| <input type="checkbox"/> Kindergarten | <input type="checkbox"/> Teachers |
| <input type="checkbox"/> Lower Elementary (grades 1-3) | <input type="checkbox"/> General Adults |
| <input type="checkbox"/> Upper Elementary (grades 4-6) | <input type="checkbox"/> Food Service Personnel |
| <input type="checkbox"/> Junior High (grades 7 & 8) | <input type="checkbox"/> Nutritionist |
| <input type="checkbox"/> High School (grades 9-12) | <input type="checkbox"/> Child Care Provider |
| <input type="checkbox"/> Elderly | |
5. **Numerical Evaluations:** Score from 1 to 5 with 1 being the lowest and 5 being the highest quality indicator.
- | | | | | | |
|-----------------------------------|---|---|---|---|---|
| Organization of Content | 1 | 2 | 3 | 4 | 5 |
| Accuracy | 1 | 2 | 3 | 4 | 5 |
| Motivational Level | 1 | 2 | 3 | 4 | 5 |
6. **Annotation:** _____
7. **Include in Catalog?** ____ yes ____ no
8. **Subjective Opinion:**
(ie, Did you like it? Is it one of the best on this subject? Would you recommend it? etc.)
9. **Evaluator:**
- Name: _____ Date: _____

TEXAS



NUTRITION EDUCATION & TRAINING

**Funded by the
Nutrition Education and Training Program
PL 85-188**

The Texas Department of Human Services NET Program is committed to assuring that program benefits are made available to all persons and provided to all eligible individuals without regard to race, color, national origin, age, sex, disability, political belief or religion. Any person who believes that he or she has been discriminated against in any NET Program activity should immediately contact the Administrator, Food and Nutrition Service, 3101 Park Center Drive, Alexandria, Virginia 22302.

**TEXAS DEPARTMENT OF HUMAN SERVICES
1995**